www.aopa.co.uk

FREE!

## Cipper Charlotte Bailey recalls a memorable day flying over California's Wine Country in a rare Piper PA-16 Clipper

BACK TO THE SKIES As GA restrictions relax we ask: "Are you ready to return to flying?" WARRIOR AT SIXTY As Piper's PA-28 turns 60 we ask Kev Arblaster why it's "just his type" ERIC THURSTON OBE Remembering the founder AOPA member, who has passed away aged 101

> MAGAZINE 04.2021 FREE TO MEMBERS WWW.AOPA.CO.UK





#### A20 AVIATION HEADSET

## A unique combination of features and benefits.

The Bose A2O Aviation Headset provides acclaimed noise reduction and a comfortable fit. It also provides clear audio with active equalisation, a *Bluetooth\** audio and communications interface\*, and customisable audio prioritisation control. Plus, it's easy to use and is among the lightest of all active noise cancelling headsets. No other headset offers this unique combination of features and benefits.

\*Available in certain variants of the headset.

Get yours at BoseAviation-EMEA.aero/shops





## CHAIRMAN'S MESSAGE

## SORRY TO 'DRONE' ON

notice from the press at the weekend that Tom Cruise is to reprise his role as 'Maverick' in a sequel to *Top Gun*, the eagerly anticipated *Top Gun*: Maverick.

When the original film was released, I was a keen glider pilot and had just started training to enable me to convert my gliding qualifications to a PPL. This time around, I gather Mr Cruise will be flying an F/A-18E Super Hornet which costs \$60m; and if he goes on to make it a trilogy, the next aircraft could be the F-35C Lightning II costing in excess of \$90m.

The point I am coming to is that once upon a time, unmanned aerial vehicles/ drones were thought to be the answer to these rising costs. Pilotless drones would be lighter and smaller, hence cheaper. I was also told that, taking into account all the costs of training the pilot, he was actually worth more than the aircraft.

A recent report from the Center for Strategic and International Studies, a think tank in Washington D.C., has concluded that it is not that simple to disconnect the man from the machine. The report goes on to evidence how, whilst the hardware costs less, the drones are being used more to satisfy the growing – indeed 'insatiable' (their words) – demand for surveillance. This has also generated huge amounts of intelligence that, in turn, requires more humans to analyse it. The conclusion: doing away with humans is hard.

I mention this because AOPA has recently become involved in a European project that is developing the concept of operations for the U-Space Service. The EU has passed this into law with effect from 2023 and it already contains provision for manned aviation.

The UK government is investing millions in drone development and many of you will have noticed the growing number of NOTAMs reserving airspace for the R&D trials of these unmanned aircraft. Airspace Change Proposals (ACPs) for the Temporary Restricted Airspace use airspace segregation but AOPA does not support such measures. Rather, it is fully supportive of a safe, integrated approach to the matter.

It is expected that AOPA's involvement in the European project will help inform our lobbying of the Department for Transport and CAA because given the government's support and funding, blocking these applications is simply not an option. [Ed: see Martin Robinson's article on Urban Air Mobility on p8 for more information on this subject].

I hope we're all looking forward to getting airborne again: working out exactly what we need to do to get back currency and beat the 'skill fade' – both of which AOPA can help with. The website contains a handy tool to check what you need to do, with access to a remote briefing if it's still unclear. If you need an examiner or instructor to fly with, you can also use the website to find one, and you don't need to be a member to do so. Fly safely.



Pauline Vahey Chairman, AOPA UK pauline@aopa.co.uk



#### EDITOR Steve Bridgewater steve.bridgewater@aopa.co.uk

**ART EDITOR** Dan Payne dan.payne@aopa.co.uk

> **SUB EDITOR** Charlotte Bailey

**PROOFREADING** Gabrielle Chambers

#### CONTRIBUTORS

Charlotte Bailey, Malcolm Bird, David Chambers, George Done, John Walker, Nick Wilcock

#### **PUBLISHED BY**

AOPA UK c/o 1 Jason Close, Orsett, Grays, Essex, RM16 3DY +44 (0)20 7834 5631

#### ADVERTISING & SUBSCRIPTIONS

AOPA UK c/o 1 Jason Close, Orsett, Grays, Essex, RM16 3DY

#### **HEAD OF ADVERTISING**

David Impey +44 (0)7742 605338

#### PRINTING

Ruddocks 56 Great Northern Terrace, Lincoln LN5 8HL +44 (0)1522 529591 www.ruddocks.co.uk

© British Light Aviation Centre Ltd AOPA is a member of the International Council of Aircraft Owners and Pilots Association, IAOPA



Articles, photographs and news items from AOPA members and other readers are welcome. Please send to the Editor. Inclusion of material in AOPA Magazine cannot be guaranteed, however, and remains at the discretion of the Editor. Material for consideration for the June 2021 issue should be received no later than 1 May 2021.

## INSIDE THIS MONTH

# **CONTENTS** APRIL 2021

**AOPA AFFAIRS** Among other topics AOPA CEO Martin Robinson reflects on the fact that recreational flying is so much more than merely flying for pleasure.

**URBAN AIR MOBILITY** With autonomous air vehicles now no longer a science fiction fantasy, we will soon have to share the skies with these unmanned aircraft.

**MAINTENANCE** Powering our way out of lockdown. Before pressing the starter button, remember piston engines are highly prone to corrosion when not used regularly.

AIRFIELDS UPDATE John Walker provides updates on aerodromes under threat from developers, as well as a look at the future of various MoD airfield sites.

**BACK TO FLYING** AOPA Training and Education Committee stalwart David Cockburn offers thoughts on how to make a safe return to the skies after lockdown.

**REGULATION ROUND-UP** An editorial round-up of some of the most recent regulatory and legislative updates from the CAA, DfT, EASA, NATS and other groups.



## 17

**WORKING FOR YOU** Fifty members joined the March meeting of the Members Working Group for an enjoyable debate about a diverse range of issues.

**18** 

**NEWS** The latest news from the GA world, including the threat to close Coventry Airport, Cirrus' limited edition SR and the 2020 General Aircraft sales figures.

**233 FLIGHT DIRECTORY** Your essential and comprehensive listing of all AOPA Corporate Members, including flight schools, official bodies, trade services and more.

**355 COVER STORY - CALIFORNIA DREAMING** Charlotte Bailey revisits a 2018 trip to Sonoma Skypark, California, where she took

to the skies in a rare Piper Clipper.

JUST MY TYPE After six decades in service the PA-28 still appeals to flying schools, hirers and owners. We ask Kev Arblaster what makes the Piper Warrior 'just his type'.

**REVIEWS** We test Aircrew's Conspicuity Interface, review artwork of Halfpenny Green, and feature books by both an AOPA member and a talented 14-year-old.

04







## EDITOR'S COMMENT

AS I WRITE these words the nation has just paused for a minute's silence, marking the first anniversary of the initial Covid-19 lockdown. Back then, few of us could have imagined that in a year's time, more than 126,000 British citizens would have lost their lives during the pandemic. Likewise, it would have seemed inconceivable that the world - with Britain at the forefront - could not only develop a series of successful vaccines but also roll them out on such an industrial scale. Yet on this first anniversary of the lockdown, somewhere near 28 million UK residents have had their first shot of a vaccine and it looks like we might be approaching a stage where life can return to some form of 'normal' (if it wasn't so difficult to type with my fingers crossed I can assure you they would've been firmly crossed as I wrote those words!). We have all sacrificed so much over the past year – be it socialising, attending the events and sports matches that we love, or the small things like hugging grandchildren or elderly relatives.

On a personal level, I was unable to hold my father's hand when he passed away in a care home last summer. Doubtless many of you will have lost friends and family to the virus and seen members of our much-undervalued key workers on their knees with exhaustion. So, in a way, it seems churlish to bemoan the lack of flying over recent months. But of course flying means so much to us all - it's either a way of life or an escape from other pressures in our lives. To many of us it is a hobby, to others it's a career, but to all of us it's a passion that runs deep in our veins. So the thought of returning to flying is a tantalising prospect. In this issue, AOPA's experts offer some advice on how best to prepare yourself and your aircraft for the post-lockdown return to flying. Further advice and guidance is available on our website and we wish you a happy and safe return to the skies.

I should probably emphasise (before my very Welsh wife accuses me of discrimination) that the dates we refer to in this issue regarding the easing of lockdown restrictions refer to England. The other devolved authorities were yet to issue similar information regarding GA when this edition of the magazine went to print.

Producing a magazine under lockdown (and with constantly changing guidelines) has been incredibly difficult, so I would like to thank my team and all those who have all gone above and beyond to ensure this issue hits your doormat on schedule.

I've really enjoyed 'meeting' many of you by email since the last issue and thank those who've taken their time to welcome me to the role and introduce themselves. Moving forward, it is my hope to include more member-led features and news in the magazine, but I need your help to achieve this. Whether you'd like to write for us or be interviewed by one of our team, we would love to include 'your' story. It might be a memorable flight, a news story about your club or home base, a review of a new bit of 'tech' or even your views on a subject you feel strongly about.

So let's hear what you've got to say for yourselves ...

feel

**Steve Bridgewater** Editor, AOPA Magazine UK steve.bridgewater@aopa.co.uk





### GIVE YOUR LEGACY PANEL NEW LIFE

Avidyne's FMS/LPV with ADS-B upgrade solution provides more features, increased capabilities, and a reliable performance proven by even the most experienced pilots. Upgrade your legacy flight deck in days not weeks saving you on downtime and installation costs.

Compatible with most legacy EFIS systems including Primus 1000 and Pro Line 21<sup>™</sup>.

#### CERTIFED, IN STOCK & READY TO SHIP!\*

Visit http://avidyne.com/business-aviation-europe for a list of Authorized Certified Dealers.

See Avidyne's FMS/LPV upgrade solution in action Avidyne.com/videos.

\* CITATION 500 SERIES, KING AIR AIRCRAFT



## AOPA AFFAIRS

## RECREATIONAL AVIATION IS SO MUCH MORE THAN FLYING FOR 'PLEASURE'

S THESE words are written it has been nearly a year since the UK went into its first Coronavirus 'lockdown' and throughout that time AOPA has remained 'in the lobby', advocating on behalf of GA – particularly as we look at returning to flying activities.

The government, in an attempt to be even-handed, banned all recreational flying on the grounds of it being a 'nonessential activity'. AOPA has worked tirelessly to explain that 'recreation' is any activity that is undertaken for 'pleasure', whereas aerodromes, maintenance providers, flying clubs and schools, as well as instructors, all form part of the 'business' that enables private flying.

#### **MORE THAN RECREATION**

There is a huge similarity between training private pilots and commercial pilots: for example, they both use simple single-engined piston aircraft. In fact, the major problem seems to be that both the CAA and Department for Transport (DfT) clearly believe that the PPL is purely a recreational licence; but this is not necessarily the case.

In my honest opinion, the DfT should have considered the business that underpins GA and should only have restricted activities that take place after the PPL had been issued.

This would have been a benefit to the flight training organisations, fuel suppliers, instructors and I am sure many others. However, engaging at this level of discussion has been extremely difficult and frustrating. The rules have been blunt and the action taken has obviously been intended to slow the spread of the virus. However, I understand that there have been different approaches towards other leisure activities – particularly those that take place in open areas, which have therefore been permitted. "The government intends for this country to become 'the best place in the world for General Aviation"



All lined up and nowhere to go. Hopefully GA should have emerged from lockdown by the time you read these words.

#### **GA ROADMAP**

The Government intends to release a roadmap setting out its objectives for GA: I am sure you will have heard by now that the aim is for this country to be 'the best place in the world for General Aviation.'

This goal is to be supported through policy statements comprising risk-based, proportionate regulations related to the activity; however, the devil is always in the detail. The CAA will need to make sure that the guidance material used internally also reflects that proportionate risk-based approach, otherwise there will be gaps between the high-level policy objectives and what the CAA is able to deliver.

An example of this is based on the original CAP 1122, which aimed to support GNSS approaches into GA airfields. This was approved by the CAA board, only to be altered after a change in personnel – leading to a lack of support for CAP 1122. Soon afterwards we saw the introduction of CAP 1616

(which did not fit GA very well) and now there is another one on the horizon, CAP 1961.

After five years of trying to establish GNSS approaches for GA we are still some distance away from touchdown: in cloud and with the probable imminent demise of EGNOS, we will have to fly the missed approach.

#### **KEEP YOUR HEAD**

On another issue I would like to emphasise that there is never a need to be rude or abusive to somebody who is just doing their job. Unacceptable language and behaviour - whether it is directed at a member of AOPA or CAA staff – will not be tolerated; we must have zero tolerance on this issue. Thankfully, this matter relates to a small minority and whilst I can understand people's frustrations at times, it is always possible to get your point of view over in an acceptable manner. Rudyard Kipling's poem If comes to mind: "If you can keep your head when all about you are losing theirs and blaming you ... you'll be a Man my son".

Finally, I wish you all a safe return to flying activities, but a sensible approach is needed as well as a recognition that 'skill fade' is an issue – albeit one that can be remedied by contacting a flight instructor.

As the saying goes: "it is better to be down here wishing you were up there than up there wishing you were down here." Safe flying everybody.



WRollinson

Martin Robinson CEO, AOPA UK martin@aopa.co.uk

## AOPA COMMUNITY













WORDS Martin Robinson IMAGES Various

## URBAN AIR MOBILITY IN THE GA WORLD: IS IT A THREAT OR ACTUALLY AN OPPORTUNITY?

With autonomous air vehicles now no longer a science fiction fantasy, we will soon have to share the skies with these unmanned aircraft. However, far from being our foe, they may bring some unexpected opportunities

THERE HAS recently been a rapid growth in companies developing Urban Air Mobility (UAM) vehicles to – ultimately – fly passengers or cargo. Often of 'quadcopter' design, these are now being created by aircraft manufacturers such as Airbus, Boeing and Bell, with some capable of carrying up to three passengers.

These developments may have a profound impact on GA but could also offer big opportunities for us. The innovation coming from UAM developments "Drones will aim to operate below 500 ft and in our cities" could reinvigorate flying, with GA needing to keep pace and take advantage of some of the new/future technologies. However, they have to be affordable; and given the projected size of the 'drone' market, this could well result in falling costs. According to Airbus: "By 2030.60% of the world's population will be urban. This significant population growth is expected to create a need for mobility options as ground infrastructure becomes increasingly congested."

#### TRAFFIC MANAGEMENT

New traffic management systems are already being developed and, combined with new operational concepts, these will enable drone flights – in time – to integrate with manned aviation. Initially, these UAMs will be piloted and will operate in much the same way as today's helicopters. Meanwhile, smaller cargo-carrying drones will aim to operate below 500 ft and in our cities.



Among the UAM creators in advanced stages of development is Joby Aviation. Its – so far unnamed – eVTOL has completed more than 1,000 test flights, and is expected to seat a pilot plus four passengers, while offering 150-mile range and 200 mph top speed. Well, that is the plan at least: but the technology is still in development and needs to be tried and tested before it can be put into practice.

I think we are at least ten to 15 years away from the rollout of autonomous systems, but could there be an earlier deployment which might be procedurally based?

Our GA aerodromes could form part of the Vertiport Network and through proper government policy and investment in infrastructure (such as charging points and storage areas), these new businesses could be a new revenue source for airfields. With correct planning, aerodromes could serve the needs of both users. I think this offers an exciting opportunity to inject new life into developing the GA aerodrome network.

In my view, reports that Coventry Airport could close while an electric vertical take-off and landing (eVTOL) hub is constructed in the city of Coventry [Ed: see News] represent a missed opportunity. As we look to the future, AOPA is engaging in evolutionary work which is all about the next generation.

#### INVESTMENT

Millions of pounds, dollars and euros are being invested in new businesses that have entered this market and Governments around the globe look upon this as part of the 'Fourth Industrial Revolution.' They have instructed regulatory bodies to facilitate development by ensuring rules are in place; Europe recently voted unanimously on regulation supporting the introduction of U-Space. The UK is keeping pace with these developments through joint academic, industrial and government partnerships.

After being in the works for a couple of years, the U-Space regulatory package is scheduled to become law in 2023 and it has been reported



Coventry's Urban Air Port is a subsidiary of sustainable tech company SMALL (Six Miles Across London Limited) in partnership with Hyundai, Coventry City Council and the UK government.



NASA is using simulation facilities to test how eVTOL designs operate around airports and cities.

that the European drone sector is expected to directly employ more than 100,000 people within 20 years, with an economic boost of  $\in$ 10 billion per year.

I am sure you are aware of the number of Temporary Restricted Airspace applications being made to support the Beyond Visual Line of Sight Operations of drones. There is a huge challenge ahead for those who set national policy and those "Integrating all airspace users will not be easy and Electronic Conspicuity (EC) is high on the CAA's agenda" who regulate airspace safety. Safely integrating all airspace users will not be easy and it should not come as a surprise that Electronic Conspicuity (EC) is high on the agenda. As these plans take shape, we will need to continue to make the case for GA. Most of the operations will be happening in the lower airspace, which, currently has limited traffic management services – but I expect this to change in the vears ahead.

09

WORDS George Done & Malcolm Bird IMAGES via Ian Sheppard

## POWERING OUR WAY OUT OF LOCKDOWN

Before pressing the starter button, let's think ... aero piston engines are typically highly prone to corrosion when not used regularly

IT'S BEEN a long winter and a long lockdown, but with spring in the air and the government relaxing the lockdown restrictions, many of us will be champing at the bit to take to the skies again.

For owners of aircraft that have been flown within the past few months (for engine health or maintenance check flights), the route back to normality is relatively straightforward.

However, some aircraft may not have been able to be thus flown, possibly for a year or more now. In this case, the situation is more problematic – especially if there had been no time to inhibit the engine, or take precautions to minimise the onset of corrosion. Additionally, it is possible the aircraft may not have had its ARC renewal or annual check completed.

Two possibilities are apparent. The first is where the owner – by prior agreement – leaves everything to the maintainer. In this case, the maintainer will have to visit "The release back to service will be something for us all to cheer about: let's take care and look forward to enjoying the freedom of the skies once again!" the aircraft on-site, or make suitable arrangements, in order to inspect and perform the tasks necessary to enable a ferry flight back to their base. There, the annual – including any remedial work – and ARC renewal can then take place.

#### **DOING IT YOURSELF**

The second possibility is that the owner is capable, under their maintainer's oversight, of doing engineering tasks that may include 50-hour checks. AOPA contacted three engine overhaulers who largely deal with the ubiquitous Lycoming and Continental engines, as well as a Rotax specialist, for their recommendations on bringing an engine back to operational life following a long period of a year or more of zero operational use. These tasks are roughly summarised as follows: • Remove and clean the

engine's spark plugs • If possible, use a borescope

to inspect the cylinder bores • If no signs of corrosion are apparent, spray WD 40 or

similar into the cylinders
Turn the engine over with the spark plugs removed, magnetos OFF: first by hand and then on the starter for, say, 10 seconds – long enough to get oil flowing within, but not so long as to overheat the starter motor.

Clearly communication with one's maintainer is key, especially if a borescope is used, as the owner may not know what to look for. Simple borescope devices that attach to a smart phone are available online, so images of the innards can be forwarded. The maintainer will also be aware of engine manufacturer Service Instructions, which may be applicable, and could be the case if the engine has been recently overhauled.

Put the plugs back in, and, if all is well keep your fingers crossed for the engine springing rapidly into life on engaging the starter!

This is where the condition of the battery becomes apparent. If circumstances are such that a prior trickle charge of the battery has been impossible, and especially if – before lockdown – the engine starts were getting a bit feeble, be prepared to find the battery lacks the oomph required to get the engine going. In this case, it will need to be charged or replaced.

The comments above have concentrated on the engine, and of course the airframe will also need particularly careful inspection, bearing in mind the long period of inactivity.

Look out for animals and insects that have decided that your aircraft provides a nice home environment. Their nests might not be obvious on first sight. Once the aircraft is finally deemed to be airworthy, one's maintainer can arrange for a Temporary Permit to Fly to allow a ferry flight to their base, to complete the necessary work for the annual check and issue of the ARC.

The release back to service will certainly be something for us all to cheer about: let's take care and look forward to enjoying the freedom of the skies once again!



There is a possibility that the owner, under their maintainer's oversight, is able to undertake engineering tasks themselves.

WORDS John Walker

## THE LATEST NEWS ON UK AIRFIELD

**ABINGDON** Earmarked for development with 1,200 homes in Vale of White Horse District Council's 2031 Local Plan Part 2, which was adopted in 2019. Development restricted to the south of Runway 08/26.

**BOURN** Earmarked for 3,500 homes in the 2031 Local Plan adopted by South Cambs District Council in September 2018. The application was approved on February 19, 2021 subject to conditions.

**BRAWDY** Defence Infrastructure Organisation (DIO) has submitted the barracks for mixed use development as part of Pembrokeshire Council's 2033 Local Development Plan 2. However, this was not included in the draft plan issued for public consultation in 2020.

**COLERNE** The aerodrome was originally expected to be sold in 2018. There is local interest in keeping the site for aviation use.

**COVENTRY** Nominated by the West Midlands Combined Authority for use as a Gigafactory [Ed: see the News pages for more].

**DISHFORTH** Not included in the 2035 Harrogate Borough Council Local Plan that was adopted in 2020 but expected to be considered in any review.

**HALTON** The DIO future vision document and Bucks Council's definitive 2033 Local Plan exclude development of the

aerodrome. Further public hearings due in April 2021.

**HENLOW** Earmarked for mixed use/specialist employment development in Central Beds Council draft 2035 Local Plan. Public hearings ending on December 18. Flying currently suspended.

**LINTON-ON-OUSE** Closed on December 18. 2020 and AIP entry was withdrawn on February 25.

**MANSTON** On February 15 the High Court quashed the aerodrome's Development Consent Order. In 2020 Thanet District Council adopted its 2031 Local Plan that safeguards the site's existing use.

**NORTH LUFFENHAM** Rutland County Council's

2036 Local Plan includes 2.215 homes on the site. Consultation that ended in November accepted the development.

#### SWANTON MORLEY

No reference to its closure is made in the definitive Breckland Council 2036 Local Plan, adopted 2019.

**TERN HILL** Consultation on Shropshire Council's draft of the 2038 Local Plan ended on February 26. It includes a 750-home mixed use development of the barracks site leaving the airfield intact.

WETHERSFIELD Future development considerations include a prison and housing use.



Flugzeuggerätebau

increased safety

in flying

Flugzeugräder

**Aircraft Wheels** 

Flugzeugreifen

Hydraulische Bremssysteme

Hydraulic Brake Systems

**Safety Tow Releases** 

Cables / Ropes

Equipment

Towing / Launching

Seile

















Tost GmbH Flugzeuggerätebau München Thalkirchner Straße 62 D-80337 München Tel. +49-(0) 89-544 599-0 Fax +49-(0) 89-544 599-70 www.tost.de

Start- / Schleppausrüstung

April 2021 AOPA Aircraft Owner and Pilot

WORDS David Cockburn IMAGES Editor

## IT'S BEEN A LONG WINTER. ARE YOU READY TO RETURN TO THE SKIES?

By the time this issue hits your doormat, the UK's lockdown restriction on private flying should have been lifted<sup>\*</sup>. AOPA Training and Education Committee stalwart, **David Cockburn**, offers some thoughts on how to make a safe return to the skies

WE MUST all have cheered when we read the Department for Transport (DfT) communication on March 2 about how the government's 'Roadmap for Easing Out of Lockdown' affects GA.

However, there are likely to be lots of misunderstandings about that message and pilots are urged to check any news with a reputable source such as the AOPA office.

Apart from anything else, as the DfT has confirmed, the projected dates are "indicative and subject to change". As it stands, if all goes well, from March 29 the British government might allow us to fly solo or with members of our own 'bubble' (for most of us, the people we live with). However, flights with others – including instructors – will not be possible until April 12\* at the very earliest.

Of course, after such a prolonged period on the ground it is natural that we will want to take advantage of these relaxations, but it is vital that we stay safe in the process. Some of us may have been fortunate enough to retain our flying skills over the last year's various restrictions. However, a good many pilots will have been grounded or possibly without the ability to even discuss flying for a long "Human factors suggest that the delay can encourage a desire to get back in the air which will try to subvert our common sense. " time, and as we all know too well, flying skills deteriorate when not used.

#### **NOT A NORMAL BREAK**

For many of us, especially those who fly from grass airfields that are susceptible to waterlogging, winter periods of grounding will be a well-known inconvenience. It might therefore be tempting to treat this enforced Covid break as any other seasonal break from flying and assume that our flying skills will not have deteriorated any more than they did after previous winters. We should be used to reading up on the manuals and planning carefully, taking it easy for the first few trips as well as avoiding challenging conditions and fully loaded take-offs. However, with the various lockdowns in 2020 I doubt whether any of us flew as much last year as usual, even if we were able to keep our ratings valid. We are unlikely to have built up the usual experience and skill level before the winter, which could well lead to us being at a much lower standard now than at the beginning of previous flying seasons.

Human factors also suggest that the delay can encourage a desire to get back in the air which will try to subvert our common sense. This spring we will need to take even more care than usual.



It's time to reach for the skies again ... but are you rusty or ready?

#### FLY WITH AN INSTRUCTOR

As a member of AOPA's Training and Education Committee, I strongly encourage you to consider taking advantage of the services of an instructor for at least your first flight after a long lay off. Of course, unless that instructor is within your 'bubble', this will mean waiting an extra 14 days before you return to the air. If you really don't want to miss out on a fortnight's solo flying consider carefully whether you really are fit to fly on your own, and if in doubt, give an instructor a call.

The lockdown guidelines have allowed most instructors to keep themselves current and any flying with an instructor can always be beneficial to a pilot, regardless of experience.

You might like to consider refreshing items such as stall revision, and practice some forced landings. What:s more, the flight will quite probably count as training towards your rating revalidation. However, it's very much up to each individual pilot to assess their own needs.

I suggest you have a look at the up-to-date 'Returning to Flying in the Wake of COVID-19' part of the GASCO website at gasco.org.uk.

The lack of contact and discussions with other pilots has probably reduced your level of theoretical knowledge, so why not have a look at the Returning to Flying quiz on AOPA's website?

To close, I'm sure quite a few of us will have allowed our individual ratings to lapse as a result of the restrictions. Renewing a rating will need the services of an examiner, but it's probably also a good idea to carry out an initial training flight to get back into practise before attempting a GST or LPC. ■

\*Dates and data correct at time of going to print and relate to England. Other parts of the UK may vary.

#### TIPS FOR PLANNING YOUR RETURN

Read your handbooks: remind yourself of how the systems work, what speeds you plan to fly at different stages of flight, and how much runway you are likely to use in various situations.

2 Talk yourself through a flight, from preflight checks through engine start, taxi, run-up, takeoff and climb, level off into cruise, descent, joining procedure, circuit, approach, go-around, another circuit and landing. Then do it again and consider what might go wrong at each stage and what to do about it.

**3**Sit in the cockpit. Without actually selecting any switches, move your hands to the required places for that flight, including your response to the problems you considered. Practice the radio calls you make, think about the replies you expect and what you might have to say next.

4 Once you are able to go flying again, but only when conditions are all favourable, carry out a simple flight. Having levelled off, I suggest practicing a couple of circuits in the sky (keeping a good lookout), including approaches and goarounds at a safe height. Try to avoid returning to the airfield when it's busy, and practise a couple of go-arounds Always be ready to go-around for real if things aren't working out optimally.

## AOPA INSTRUCTOR REFRESHER COURSES

For revalidation of an FI certificate, the holder shall fulfil two of the following three requirements:

1 At least 50 hours of flight instruction during certificate validity as FI, TRI, CTI, IRI, MI or Examiner;
2 Attend a Flight Instructor Refresher Seminar within the validity of the certificate; and
3 Pass an Assessment of Competence within the 12 months preceding the expiry of the certificate.

For at least each alternate subsequent revalidation, an assessment of competence must be undertaken. In the case of a renewal you should, within 12 months before renewal, attend a Flight Instructor Refresher Course and pass an assessment of competence.

#### **NEXT DATES**

The next dates for the course are

#### July 6-7, 2021 November 23-24, 2021

Approval has now been obtained from the CAA to run these courses using Zoom during the current pandemic. It is therefore imperative that any candidate is up to speed on using Zoom prior to commencing the course. Further information can be obtained from Course Administrator, John Pett, on 07754 780335. Please book the course online at www.aopa.co.uk



To register for a place on any of the seminars please call the AOPA office on 020 7834 5631 or join online at WWW.AOPA.CO.UK. The courses start at 0930 and end at 1700 each day. WORDS Steve Bridgewater IMAGES Various

## **REGULATION ROUND-UP**

An overview of some of the most recent regulatory and legislative updates from the CAA, DfT, EASA, NATS and other groups

SHORTLY BEFORE these words went to print in late March the CAA announced that it had received confirmation of funding from the Department for Transport (DfT) to support the airspace design change initiatives that are a core element of its Airspace Modernisation Strategy.

The CAA initially responded to the Airspace Change Organising Group's (ACOG) 'Remobilising the Airspace Change Programme' report last year and immediately accepted three of its recommendations.

The DfT and CAA committed to consider the remaining recommendations in further detail and one of these points was financial support for the future airspace strategy implementation (FASI) initiatives as part of the CAA's Airspace Modernisation Strategy (AMS). The DfT will now be providing funding to enable FASI airspace change sponsors through a grant administered by the CAA. This will enable sponsors to continue through stage 2 of the Airspace Change Process (ACP) – known as CAP 1616 as part of the government's commitment to supporting the aviation sector and decarbonisation.

According to the regulator: "Despite the pandemic, airspace modernisation remains a critical part of the UK's national infrastructure development, and will provide a wide range of benefits, including carbon savings, noise benefits, increased resilience, time savings for passengers, and better access for all users of airspace.

"The pandemic has

understandably led to those airports looking to sponsor an airspace change as part of the FASI programme to pause their activities. To restart these activities, sponsors will require short-term funding. This will enable the administration of a grant to help the airspace change sponsors involved in the masterplan progress their airspace design changes." The CAA has now considered ACOG's remaining recommendations as follows: **RECOMMENDATION:** That ACOG and National Air Traffic Services (NATS) re-evaluate the programme deployment plan to ensure that the airport-led and network ACPs are aligned and can be incorporated into iteration 2 of the masterplan. **REPLY:** The CAA agrees that it is fundamental for the programme for both airport sponsor and network ACPs to be aligned in order for them to be incorporated in the next iteration of the masterplan. **RECOMMENDATION:** That ACOG examines options for external financial support for delivering the programme objectives and, if appropriate, the potential options for accessing and managing funds. **REPLY:** The DfT has now announced a funding support package for the FASI programme that will support the airport airspace CAP 1616 process. **RECOMMENDATION:** 

That ACOG, the airport ACP sponsors and NATS assess how best to achieve the airspace emissions savings contribution set out in the Sustainable Aviation Decarbonisation Roadmap. **REPLY:** The CAA welcomes ACOG's commitment to sustainability, and encourages them to work with airport ACP sponsors and NATS to assess how they can achieve airspace emissions savings.

#### **RECOMMENDATION:**

That ACOG work with GA and unmanned aircraft system stakeholders to explore the options for the programme to ensure their needs and requirements are collectively coordinated with ACP sponsors, potentially leveraging additional funding support from UK Research and Innovation via the future flight challenge.

**REPLY:** The CAA agrees that it is important that the airspace modernisation masterplan process is used as an opportunity to open up airspace for all users, including general aviation and new types of aircraft such as drones. **RECOMMENDATION:** That ACOG gathers stakeholder feedback in the form of a lessons-learned exercise to help inform any process improvements associated with the application of the CAP 1616 guidance.

**REPLY:** The CAA agrees with this recommendation and encourages stakeholders to engage with ACOG on this lessons-learned exercise. **RECOMMENDATION:** That the CAA considers producing detailed guidance on the treatment of trade-off decisions for airspace design when one objective (for example, sustainability) has more weighting than others (such as noise mitigation or capacity). **REPLY:** The CAA agrees that a number of trade-off decisions will potentially need to be made, and these will

be consulted on by ACOG in due course. However, the DfT, which is responsible for aviation-related policy, will not be able to provide detailed guidance that will cover all potential trade-off decisions. The CAA says each decision should fully take into account the individual circumstances and relevant policies at the time.

RECOMMENDATION: That ACOG ensures ACPs below 7,000 ft progress coherently with plans to remobilise operations and enhance network performance via NATS En Route Limited's (NERL) engagement with the EUROCONTROL Network Management Transition Plan and Operational Excellence Programme.

**REPLY:** The CAA agrees that alignment between airport ACPs, and plans to remobilise operations and enhance network performance, is important.

#### **TRAVELLING ABROAD?**

Yes, travelling might seem like a pipedream at the moment, but the time will (hopefully) come soon when we can think about flying across the Channel once again. The UK Border Force has therefore asked us to remind you of the importance of completing the new 'Declaration for International Travel' form.

#### **PIPER SPAR INSPECTIONS**

In January the FAA published an Airworthiness Directive (AD) 2020:26-16, covering a variety of single-engine Pipers that carry either a PA-28 or PA-32 model number. An incredible 5,440 airframes are affected in the USA alone.

The US AD was prompted



The new wing bolt Airworthiness Directive will affect 635 Piper PA-28s on the UK civil register.

by an NTSB investigation into a fatal accident in which the wing separated from a Piper PA-28R-201. The occurrence was deemed to have been caused by "fatigue cracking in a visually inaccessible area of the lower main wing spar cap."

Based on the outcome of the factored Time in Service (TIS) hours, the AD requires a one-time eddy-current (EC) inspection of the inner surface of the two lower outboard bolt holes on the lower main wing spar cap for cracks and, depending on findings, replacement of the main wing spar with a new main wing spar, or a used main wing spar that has passed (no cracks found) an EC inspection.

It initially required the installation of inspection panels close to the main wing spars to give technicians access to that area when searching for corrosion. Piper has revised its service information to add a minimum thickness dimension for the top inboard wing skin and to include procedures for reapplying corrosionpreventive compound if removed during the inspection. Also, the FAA replaced the proposal to install access

panels for the visual inspection with optional access methods. These include the use of existing access panels, installation of access panels, accessing the area during a concurrent inspection, or using a borescope through existing holes or openings.

#### **CAA RULING**

Here in Britain, 944 PA-28s are on the UK civil register and the AD applies to 635 of them. The CAA and EASA have decided to approach the AD slightly differently as the FAA uses a different way to factor the hours flown and when inspections are measured, compared with the UK and Europe.

The CAA and EASA have therefore worked with Piper to come up with an alternative factored-hours calculation and issued a Proposed Airworthiness Directive (PAD) on March 12.

The FAA AD is applicable to aeroplanes that have accumulated 5,000 hours TIS or more (or have a main wing spar replaced with a used example) and also applies to those airframes for which maintenance records are missing or incomplete. The "If you're flying overseas it's important that you complete the new 'Declaration of International Travel' form" US directive also requires calculation of 'factored service hours' (FSH), determined by the number of 100hour inspections or annual inspections that have been accomplished on a main wing spar since new.

Following the joint CAA/ EASA review of the FAA AD, it was determined that, since in Europe there is no legal distinction and documentation requirement between the accomplishment of 100hour inspections and annual inspections, depending on the operation of the aeroplane, the FAA calculation method for FSH is inappropriate.

#### **SERVICE CALCULATIONS**

The CAA/EASA PAD requires repetitive calculations of average annual utilisation (AAU) and EASA FSH (EFSH). Owners of CAA or EASA registered machines are therefore required (within 30 days after the effective date of the AD, and thereafter during each 100-hour or annual inspection) to review the aeroplane maintenance records for completeness and determine whether a wing or wing spar has been replaced with a wing or wing spar that had more than zero hours TIS at the time of installation. If it is determined that the wing spar has accumulated or exceeded 5,000 hours TIS – or the hours TIS are unknown – owners should calculate the AAU. If this is 100 TIS/year or more, before further flight the EFSH should be calculated using the following formula: EFSH = [TIS - (100 x Years)] + (100 x Years) / 15

If, as a result of the calculation, the EFSH are determined to be 5,000 or more, owners need to accomplish an EC inspection of the inner surface of the two lower outboard bolt holes on the lower main wing spar cap for cracks within 100 hours after accumulating 5,000 EFSH, or within 100 hours after the effective date of the AD, whichever occurs later.

If the maintenance records are found to be incomplete, or the spar/aeroplane TIS or FH are unknown, the EC inspection needs to be conducted within 100 hours of the AD being issued.

Should the EC inspection detect a crack that exceeds the acceptance criteria of the Service Bulletin, the main wing spar needs to be replaced with a new or serviceable unit before the next flight.

Before the next flight after the EC inspection new wing bolts will also have to be installed, so it is a fair assumption that these will become difficult to obtain. Owners are also required to report the inspection results to the CAA, FAA and Piper Aircraft within 30 days after the EC inspection. Being a PAD, the CAA's AD is currently out for comment, so the regulation won't come out until after the end of the consultation period on April 9.

#### **SKILLS RETENTION**

In February AOPA signed up to the DfT's Aviation Skills Retention Platform (ASRP). This has been created to support skills retention within the UK aviation industry and is designed to help talented individuals showcase their experience and expertise while helping businesses find the skills they need.

ASRP provides direct support for both redeployment and recruitment activities, together with a framework for wider skills retention and development programmes across the aviation sector

The vision for this initiative is to support the retention of people and skills as well as providing a platform that aligns as a wider strategic solution for the recovery of the aviation industry and its development needs.

It is a not-for-profit programme supported by business associations, member companies, professional institutions, unions and other stakeholder organisations such.

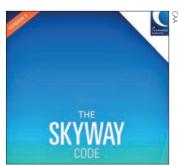
Companies interested in recruiting candidates can contact them directly through the platform, and also upload any job vacancies they wish to promote. For individuals, the ASRP provides a tailored portal through which candidates can register their personal profile and CV and search for vacancies in aviation and across other key sectors. Take a look at www.aviationtalent.co.uk for more information and how to become involved.

#### **SKYWAY CODE**

As you would imagine, the combined fall out of coronavirus and Brexit has been keeping the CAA busy in recent months but it still found time to publish the third edition of its Skyway Code in February. Designed to provide GA pilots with quick and easy access to key information relevant to their flying, version 3 brings the publication up to date with changes to reflect the UK's departure from the European Union, as well as the latest regulatory requirements.

Compared with earlier versions, the new Skyway Code includes updates to all aeronautical information, including radio frequencies and frequency monitoring codes. Radiotelephony exchanges have also been updated to reflect latest CAP 413 documentation and a section also includes guidance on the use of moving-map devices and avoiding airspace infringements. Introductions to Electronic Conspicuity and Unmanned Aerial Systems (UAS) have also been added along with a description of 'Just Culture' within GA.

On the subject of UAS, the CAA, the Home Office and the Police has begun Operation Foreverwing to clamp down on drone-related crimes. This comes after 336 drone-related incidents were recorded during the last five months in the UK and sees the organisations "Introductions to Electronic Conspicuity and Unmanned Aerial Systems have been added to The Skyway Code along with a description of 'Just Culture' within GA"



Brexit, use of moving-maps, Electronic Conspicuity, drones and a 'Just Culture' are just some of the headline changes in the latest version of The Skyway Code. working together in a bid to ensure drones are registered and to deter owners from breaking the rules. Those rules can be found in the Drone Code on the CAA website.

In other CAA news, the regulator's GA Comms Manager, Alex Blomley, tells *AOPA UK* that the RAF intends to trial a new low-level frequency (122.280) this year. Although the introduction date is yet to be confirmed it is thought that this scheme will help build a better air picture for all aviators.

#### **CLASS 2 MEDICALS**

Alex also confirmed that AMEs in England will be able to restart issuing and renewing Class 2 medicals from March 29. Cellma (the new medical IT system) is being introduced to replace an obsolete system (PIMS MARS) that has been in service for the last 19 years. According to Alex: "Downtime, data security and an inability to develop our existing system has forced a change upon us which has been in train for the last three and a half years."

Up until now, the CAA medical teams have been using systems which have been in place since the late 1990s. The technology is no longer supported, and maintaining it has become problematic. The CAA is therefore introducing Cellma to provide a secure method of processing self-declarations and medical certificates.

Before you attend your next medical you must now log in to your CAA Customer Portal Account and complete the medical application form. Information regarding charges can be found on the CAA website. Alex says: "The new system will include an ability for applicants to view their own medical records and to track progress of applications and referrals." It also features improved identity fraud security – ensuring that the candidate that turns up for the medical is the person they say they are.

WORDS David Chambers – AOPA UK Members Working Group Chair IMAGES Steve Bridgewater

## MEMBERS WORKING GROUP

Fifty members joined the March meeting of the Members Working Group for an enjoyable debate about a diverse range of issues

THE LATEST meeting of the Members Working Group – held on March 20 - was the best attended to date with 50 participating via Zoom. The switch to online meetings has undoubtedly been a success, enabling those from around the country (and even abroad) to join in. Many have encouraged us to retain this mode of operation for future meetings and investigate running a hybrid format mixing those on-site with others attending remotely. If you have expertise in the best practice required, please get in touch.

Our January meeting had discussed the AOPA mentoring scheme and unanimously recommended that it be closed down, partly because Class Rating Instructors can now fulfil much of that role. This has been agreed by the Training and Education Committee and the scheme removed from the AOPA website.

#### **AOPA WINGS**

During this meeting we revisited the AOPA Wings scheme, launched in 2003 but no longer as successful as it might be. A group of volunteer members stepped forward to compare it with similar programmes, which all now sit under the umbrella of the CAA's PROUD initiative, and recommend how it might be refined and promoted more effectively. One suggestion was to review the relatively large number of hours required to be flown to achieve the highest Platinum award - many more than

the average PPL achieves in their lifetime. Another is the recency of courses/seminars, with a view that those taken many years previously might be discarded to encourage more continuous and ongoing education.

#### STREAMLINING

The other hot topic considered what might be possible in a post-Brexit regulatory environment. Whether or not you think leaving Europe (and therefore EASA) is a good idea, the deal is done and we should be looking at which of the regulations could be streamlined, improved or completely discarded. This requires vision of what we want - quite difficult when attempting to satisfy such a diverse membership and industry - and what is realistically achievable; an area where AOPA can draw on considerable expertise and background knowledge.

Martin Robinson presented a list for discussion which included aspects to simplify licencing (and encourage more of the administrative processes/documentation to move online); greater empowerment of DTOs (to include training for any PPL rating such as the IR and FIC); reduce unnecessary maintenance paperwork (e.g. recognising any FAA STC by default); and remove the requirement for mandatory handling at larger airports. No doubt this list will be refined and revised over coming months, and we would welcome your suggestions: david.



The March meeting was once again held via Zoom, but the next meeting may include an 'in person' element.

chambers@aopa.co.uk It's easy to complain about the complexity of the different types of licence (FCL, PPL, NPPL) or medicals (Class 1.2. LAPL, PMD) to determine which types of aircraft you might be allowed to fly (G-Reg, N-Reg, other Reg, Microlight, SMG, TMG, SSEA, < 2 tonnes, < 5.7tonnes). It's much harder to come up with a simple scheme that combines just one licence, a few levels of medical and aircraft classifications.

Other topics discussed in the meeting included AOPA experts commenting on: • The CAA exemption allowing those with non-Part FCL licences to fly Part 21 aircraft.

• The consequences of our withdrawal from the EGNOS satellite system in June, which will reduce LPV instrument approaches to LNAV minima and affect the take-up of these approaches by GA airfields. AOPA continues to lobby for government action to negotiate a settlement. • The medium to longer term impact of drones for airspace. AOPA recently won a bid for funding to participate in Project CORUS, a research programme looking at how UAVs and other airspace users can co-exist. Airspace Modernisation in the UK remains a long term project. Airfield planning developments, which John Walker keeps a close eye on. • AOPA's move to new premises and investment of

the surplus funds. The next meeting is on June 26. Although I suspect many of us hope to be

many of us hope to be making up for lost time and flying a lot by then, please consider joining us on that morning and making a contribution. It's hard to say if we will also meet in person, but I plan to enable Zoom participation. If you can't make it, please do continue to support AOPA's work – it's only made possible by our members although it benefits the entire GA community. General Aviation news from around the world





## **COULD 'GOING GREEN' SPELL THE END FOR COVENTRY?**

After serving the community for 85 years Baginton could be turned into a factory to build electric vehicle batteries – is this the cost of 'Going Green'?

COVENTRY AIRPORT (CVT) - known as Baginton to many - is under threat following an application to use the site as a Gigafactory to build electric vehicle batteries.

Coventry City Council plans to enter into a Joint Venture partnership with Coventry Airport Ltd to develop the facility, which is at the heart of what remains of Britain's motor industry. The West Midlands Combined Authority has formally endorsed Coventry Airport as the preferred site for the 4.5 million sq ft Gigafactory, which could be operational by 2025.

There has been an airfield at Baginton since 1936 and aircraft manufacturer Armstrong Whitworth built a factory on the airport site soon afterwards. Whitley bombers were among the types 'born' at Coventry.

Meanwhile, the government has pledged its backing for an innovative electric vertical take-off and landing (eVTOL) hub to be constructed close to Coventry city centre. If it goes ahead, Urban Air Port Air-One will be the world's first fullyoperational hub for eVTOL "West Midlands Combined Authority has endorsed the plan for the airfield"

ABOVE: Coventry Airport has been operational since the 1930s and has been a haven for historic aircraft as well as GA. aircraft such as cargo drones and air taxis. The hub will be 60% smaller than a traditional heliport and emit net zero carbon emissions.

Coventry is the 2021 UK City of Culture and is set to play a role in the 2022 Commonwealth Games. Its university is also instrumental in the development of electric vehicles, and in December the city was named the best in the country for electric cars. However, it looks like that might come at the cost of a historic, valuable and muchloved airfield.

## SPIRIT OF INNOVATION POISED FOR HISTORIC MAIDEN FLIGHT

ROLLS-ROYCE'S electricpowered Spirit of Innovation aircraft has begun taxi trials at Gloucestershire Airport as the cutting-edge machine approaches its maiden flight. Based on the Nemesis NXT air racer, G-NXTE is powered by a 500 hp electric powertrain and the latest energy storage technology. It has been developed by



The 350 hp Nemesis NXT won the 2009 Reno Gold race at 407 mph. The basic design has been used by Rolls-Royce to form the basis for its electric-powered Spirit of Aviation.

the company's Accelerating the Electrification of Flight (ACCEL) programme to set world speed records and enable a new generation of urban air mobility concepts.

It is hoped the aircraft will exceed 300 mph, setting a new world speed record for electric flight. The ACCEL project is part of Rolls-Royce's plans to inspire young people to consider careers in STEM (Science, Technology, Engineering and Mathematics). The engine manufacturer has also developed downloadable Spirit of Innovation materials linked to primary school curriculums; these can easily be downloaded from the company's website.

## FLYING CAR CERTIFICATION MOVES UP A GEAR

THE TERRAFUGIA Transition flying car has obtained a Special Light-Sport Aircraft (LSA) airworthiness certificate from the FAA.

The 100 hp Rotax 912iS-powered "roadable aircraft" has been designed to meet safety standards from both the FAA and the US National Highway and Traffic Safety Administration (NHTSA). The company says it will now begin selling 'flight only' versions to owners with a view to the airframe being both sky and road legal by mid-2022.

The Transition has an airborne cruise speed of 100 mph and can use either Mogas or 100LL aviation fuel. Standard features include folding wings that



The Terrafugia Transition now has an airworthiness certificate but is yet to be approved for road use.

allow it to be stored in a single-car garage. A 400 statute mile range and 500 lb useful load is claimed.

Meanwhile, Dutch-based PAL-V has begun the EASA certification process for its Liberty "roadable gyroplane." The two-seater was approved for road use in Europe last October. Elsewhere in Europe, the Slovakian AeroMobil flying car completed a series of flight tests as part of its EASA certification programme in March and the company expects to have the flying car on sale sometime in 2023.

#### AOPA NEWS HIGHLIGHTS

#### The General Aviation

Safety Benchmark Group (GASBG) was launched in February as a nocost group open to GA airports to share data and experiences with the aim of improving safety. Interested parties can contact Chairman, Harry Harrad, on hharrad@ Iondonoxfordairport.com for further information.

#### The World Championship

Air Race (WCAR) has agreed a partnership with FAI and the World Air Sports Federation to stage an international series of air race festivals starting in 2022. Similar in format to the much-missed Red Bull Air Race, the FAI has granted UK-based WCAR exclusive staging rights on a range of piloted air races flown on air-gate courses.

#### Glasgow Airport is

becoming increasingly GA-friendly. Although handling is mandatory, private aircraft up to 2 tonnes MTOW can now use the resident Glasgow Flight Centre (GFC) as their handling agent at zero cost. The SEP landing fee is £39.95 and aircraft parking £19.95 a day. Avgas is available. Pilots need to obtain PPR online.

#### A survey of the world's

airline pilots revealed that only 43% were still doing the same job they had before the pandemic. A poll of 2,600 pilots found a further 30% were unemployed, 17% furloughed and the others moved on to other careers. Many of those still in work were also being paid less, with some accepting a 58% pay cut.



# WATT'S NEW IN THE ELECTRIC WORLD?

Funding for green aviation projects, a plan to use 100 GA airfields as part of a sustainable aviation network, and maintenance courses for electric aircraft

IT SEEMS that most of the news in the GA world at the moment involves electric propulsion and 'watt'-ever you're looking for, 'joule' find it in these pages. (Sorry, that was 'shocking'... but hopefully it will 'spark' some debate)

In February, the UK government announced £84 million was being invested in three 'green aviation' projects. These consist of Blue Bear Systems Research's InCEPTion programme to develop a fully-electric propulsion system for a small, short range aircraft and GKN Aerospace's H2GEAR project. The latter will receive £27.2m to develop an innovative liquid hydrogen propulsion system for regional air travel, which could be scaled up for larger

aircraft and longer journeys. Additionally, ZeroAvia's 19seat HyFlyer II (featured in the last issue of AOPA UK) will receive £12.3m in government grant money.Elsewhere in the UK, a group of companies and universities has launched Project HEART (Hydrogen-Electric & Automated **Regional Transportation**) as part of the Future Flight Challenge. The aim of the HEART programme is to create the foundation for a fully sustainable and scalable commercial aviation network that could connect the entire UK. It focuses on electrifying and automating the Britten-Norman Islander, and utilising up to 100 licensed GA airfields around the UK. The project's first milestone

will be to demonstrate single pilot operations with an autonomous co-pilot providing access to more information than human perception alone can provide.

Meanwhile, the Pipistrel Velis Electro – the world's first certified electric aircraft – has now been approved by the CAA for flights in the UK and NEBOair will soon be offering flights in the Sloveniandesigned aircraft from Damyns Hall. Pipistrel also claims to be nearing the launch of a new hydrogen fuelcell- and battery-powered 19-seat hybrid that it hopes will revolutionise commuter airliners. Pipistrel says the aircraft could have a range of 1,000 miles on a tank of liquid hydrogen.

Crucially, Pipistrel has also started running maintenance type-training courses for Part-66 licensed aircraft mechanics on its electric powered aircraft. The company hopes to run the five-day EASAapproved course monthly.

Elsewhere, Coloradobased Bye Aerospace is in the process of obtaining FAA Part-23 certification for its eFlver 2 aircraft; French company Aura Aero has announced it is to develop an electric propulsion system for its two-seat aerobatic aircraft; and Embry-Riddle University's eSpirit electric aircraft has begun taxi trials. The eSpirit is based on the Diamond HK-36 and will be a testbed for students to develop new electric technologies.

## CIRRUS LAUNCHES LIMITED EDITION SR SERIES

TO MARK the delivery of its 8,000th aircraft, Cirrus Aircraft has introduced the 8000 Limited Edition SR Series. Just eight will be manufactured, featuring a 'Volt' green paint scheme, and a series of gifts and exclusive events for the owners. The first Cirrus SR20 was delivered in 1999 and since then the type, along with spin-off SR22 and SR22T variants, has held the top-selling singleengine piston spot for 18 years running. According to Cirrus, the fleet has logged



The 8000 Limited Edition SR is certainly distinctive.

over 11 million flight hours in more than 60 countries. At least 140 lives have also been saved by the Cirrus CAPS emergency parachute system.

## PISTON SINGLES POWER THROUGH THE PANDEMIC

DESPITE THE economic uncertainty caused by the Covid Pandemic last year, sales of pistonpowered aircraft fell by just 1% compared with 2019, according to figures published by the General Aviation Manufacturers Association. However, sales of business jets and turboprops fell more significantly, leading a collective 10% decline in fixed-wing aircraft deliveries during the period. Helicopter deliveries fell by more than 16% and overall GA sales dropped to \$22.8 billion, a decrease from \$27.8 billion in 2019. Cirrus was once again the bestselling manufacturer, delivering 420 aircraft in 2020. Piper sold 244 aircraft, including 149 Archer IIIs; Cessna sold 241 Skyhawks; and Austria's Diamond Aircraft delivered 239 aircraft including 143 DA40s and 62 twin-engined DA42s. ■

## NEW WINGS FOR THE NATIONAL FLYING LABORATORY

THE CRANFIELD-BASED College of Aeronautics has been at the forefront of aviation and aerospace research and education since 1946. It is the only university in Europe to have its own airport, pilots, air navigation service provider and its own aircraft. That aircraft acts as the National Flying Laboratory Centre (NFLC) Flying Classroom and until recently has been a Scottish Aviation/BAe Jetstream 31. As reported in the October 2020 issue of the magazine, the time has come to replace that airframe, and an aircraft has now been selected.

The chosen Saab 340B is a larger aircraft than the Jetstream and will allow the university to fly more students as part of their engineering and aerospace courses. Following a twoyear long campaign, the university has already achieved over two-thirds of its ambitious £3 million fundraising target. With the aircraft scheduled to arrive at Cranfield this spring, the campaign now shifts to raising the remaining funds in order to complete the modifications to the aircraft.

To find out more about the NFLC and how you can help, visit www.cranfield.ac.uk/ NFLCcampaign

#### AOPA NEWS HIGHLIGHTS

#### From May 20, 2021

the UK will revert to the previous rules on flight visibility and distance from cloud in Class D airspace (that existed up to March 26, 2020). According to the CAA: "This reflects the wave of feeling seen in the submission to the recent General Aviation Consultation on life after leaving EASA." The minima will apply to aircraft flying below 3,000 ft AMSL or 1,000 ft above terrain (whichever is the higher) and at an indicated airspeed of 140 kts or less.

#### The US Department

of Transport is making nearly \$2 billion in grants available to GA airports as part of the country's Covid Relief Bill. Most of the funds will go toward costs related to making the airfields 'Covid Secure' but the scheme also includes money for rent relief to airport concessions.

NetJets has signed an

agreement with Aerion that includes options for 20 Aerion AS2 supersonic business jets. Aerion has also announced plans to collaborate with aviation training provider FlightSafety International to develop a flight training academy for its supersonic civil and commercial aircraft.

#### The British Women

Pilots' Association has launched its 2021 aviation scholarships provided by CATS Aviation, Bristol Groundschool, Easy PPL, 624squadron.com and Helicentre. Fifteen scholarships are available this year with details at www.bwpa.co.uk

# CAA PART 21 EXEMPTION

## UK National Pilots will be able to continue flying Part 21 SEP aeroplanes until June 2021, by which time it is intended that the regulations will have changed for good

THE CAA has confirmed that pilots holding UK national licences will be allowed to fly Part 21 SEP aeroplanes and touring motorgliders (TMGs) under an exemption until June 2021. It is anticipated that legislation introducing a permanent change will come into place before that date. Part 21 aircraft are what used to be known as 'EASA

aircraft' and include most popular type-certificated aircraft such as Cessnas, Diamonds and Pipers. Conditions apply to the exemption, meaning that the



Pilots holding UK national licences can now fly Part 21 SEP aeroplanes such as the Cessna 172 under an exemption until new legislation comes into place this summer.

Part 21 aeroplane needs to be G-registered and that it can only be flown within the UK or a UK dependency. Day and night VFR flying is permitted but cost-sharing, commercial operations and flight training are prohibited (unless with a flight instructor). The CAA emphasises that: "A licence holder must not exceed a maximum accumulative total of 12 flying hours as PIC permitted by this exemption.

"The purpose of these flights must be to regain competence and familiarisation or to cover any specific differences associated with Part 21 SEP aeroplanes or TMGs."

"The first flight by a licence holder under this exemption must be a flight with a Flight or Class Rating Instructor of at least one hour's duration if the licence holder has not flown since April 8, 2020." We at AOPA will continue to monitor the situation and will provide updates if required.

## ERIC THURSTON OBE, 1920-2021

IT IS WITH great sadness that we share news of the passing of Eric Thurston OBE on January 24, at the grand age of 101.

Eric was a founding member of the British Light Aviation Centre (the forerunner of AOPA) and his contributions to aviation were considerable.

He became an aero engineer before the war and took part in D-Day during his National Service, receiving a mention in dispatches from Field Marshal Montgomery for his contribution to military transport.

Eric obtained his pilot's licence in 1953 and took over the engineering facility at Stapleford Airfield before going on to obtain his instructor and examiner ratings. In 1966 he became a member of the Professional Pilots Committee of the Ministry of Aviation and subsequently the Advisory Committee to the



This depiction of Eric was painted by Jane Thornhill in 2003 and hangs in Stapleford's clubhouse. It shows him with the Piper Seneca G-TEST in which he examined many a multiengine and IR instructor. newly created CAA.

At the age of 65 Eric became Chief Flying Instructor at Stapleford and held the post until October 2000. Even then, he continued to instruct in the simulator for a number of years, passing his skills to countless aviators.

Eric was also a pioneer in air taxi and charter work and his regular air ambulance flights around Europe earned him the Order of St John for his "commitment to making lifesaving flights whenever he was asked to".

The famous students and passengers in his logbook included Prime Minister Harold Wilson and pop groups such as The Beatles and The Rolling Stones.

Eric's extensive contribution to aviation was recognised with an OBE and he was also awarded the Sword of Honour by the then Guild of Air Pilots and Air Navigators.

# AND CHI OUT AOPA 2021 UK FLIGHT DIRECTORY

Your essential and comprehensive listing of all AOPA Corporate Members, including flight schools, official bodies, trade services and more

## **CORPORATE FLYING CLUB LIST**

#### **CHANNEL ISLANDS**

JERSEY

#### JERSEY AERO CLUB

Jersey Airport, L'Avenue de la Reine Elizabeth II, St Peter, JE3 7BP T: 01534 743990 E: info@jerseyaeroclub.com W: jerseyaeroclub.com **Types:** 1 x Tecnam P2008 1 x Tecnam P2010

ENGLAND

BEDFORDSHIRE

#### azure ×

#### AZURE FLYING CLUB

Building 187, Rooms F03/04, Cranfield Airport, Wharley End, Cranfield, MK43 0JR T: 01234 581580 E: secretary@azure.com W: flyazure.com Formerly the Britannia/ Thomson Airways Flying Club. We have two bases with a total of three aircraft; Cranfield covers membership north of London and Wellesbourne Mountford caters for members in the Midlands. We have instructors who can offer everything from check-rides to training for PPL, IMC and night ratings.

#### Types:

2 x Piper PA-28 (Cranfield) 1 x Piper PA-28(Wellesbourne)





#### WEST LONDON AERO CLUB

White Waltham Airfield, Maidenhead, SL6 3NJ T: 01628 823272 E: ops@wlac.co.uk W: wlac.co.uk White Waltham is home of the West London Aero Club (WLAC) and is one of the oldest airfields in the country, set on the edge of a picturesque estate in beautiful countryside. If you are interested in learning to fly this is the place. The club has plenty of parking and a wonderful atmosphere, with its friendly and historic clubhouse, a wide choice of aircraft and enthusiastic instructors.

#### Types:

1 x Beechcraft B76 Duchess 1 x Cessna 150 2 x Cessna 182 1 x PA-18 Super Cub 9 x Piper PA-28 Warrior 1 x Piper PA-28-180R Arrow 1 x PA-32R-301

#### BUCKINGHAMSHIRE

#### Denham Aerodrome

#### BICKERTON'S AERODROMES LTD

Denham Aerodrome, Tilehouse Lane, Uxbridge, UB9 5DF T: 01895 832161 E: operations@thepilot centre.co.uk W: thepilotcentre.co.uk Flying has been taking place at the site of Denham Aerodrome since the early 1900s. It has been operated by Bickerton's Aerodromes Ltd since the 1930s and was licensed by the CAA in 1938.



#### LAPWING FLYING GROUP

Denham Aerodrome, Tilehouse Lane, Uxbridge, UB9 5DF T: 01895 833880 E: MartinBowley@hotmail.com W: lapwingflyinggroup.co.uk First formed in 1965, Lapwing is a small group of very friendly, informal, dedicated aviators who come from a wide range of backgrounds. Experience levels range from airline pilot to basic student, but we all love flying. **Types:** 

1 x Piper PA-28-151



#### THE PILOT CENTRE LIMITED

Denham Aerodrome, Tilehouse Lane, Uxbridge, UB9 5DF T: 01895 833838 E: operations@thepilot centre.co.uk W: thepilotcentre.co.uk A friendly flying club with an up-to-date fleet at reasonable prices. Courses: LAPL(A), PPL(A), Night rating, IR(R), FI(A), Night Derestriction, FI(A) Applied Instrument Instruction, Tailwheel, Flying Companions course, PPL Ground School. Discount on full membership for AOPA members.

#### Types:

9 x Cessna 152 2 x Cessna 172 1 x Cessna 182RG 1 x Citabria 5 x Piper PA-28

CAMBRIDGESHIRE

Contraction of the second seco

#### AEROLEASE LTD FLYING CLUB

Peterborough Business Airfield/Conington, Holme, Peterborough, PE7 3PX T: 01487 834161 E: info@flying-club-conington. co.uk W: flying-club-conington.co.uk We can offer you the full

range of private pilot training, from PPL up to additional ratings including multi-engine, IMC, radio navigation and more. There's a comprehensive fleet of aircraft, 987 m of fully licensed hard runway and fuel and maintenance available on-site, we're sure you'll soon be able to see the advantages of flying with us. This is a club where you can talk flying, hire aircraft, take part in flying activities or bring your family for club events. We're open

to the public, so just walk in and see us. You can also have something to eat in our conservatory with a view over the airfield.

#### Types:

1 x Beechcraft B76 Duchess 3 x Cessna 152 2 x Piper PA-28-161 1 x Piper PA-28R-201



#### CAMBRIDGE AERO CLUB

Gate D, Cambridge Airport, Newmarket Road, Cambridge, CB5 8RX T: 01223 373717 E: enquiries@ cambridgeaeroclub.com W: cambridgeaeroclub.com Cambridge Aero Club is a CAA registered ATO. All aspects of training, safety management systems, aircraft and instructors are continually monitored and audited. Our highly skilled team of instructors have an unrivalled level of experience in everything from Flight Experiences and PPL training to advanced handling, aerobatics, IR(R) and the CBIR. Our new Pooleys, Bose and Garmin outlet is open.

#### Types:

3 x Cessna 172 SP 1 x Extra EA200 1 x Piper PA-28



#### CAMBRIDGE FLYING GROUP

Cambridge City Airport, Newmarket Road, Cambridge, CB5 8RX T: 01223 264262 E: info@cambridgeflying group.co.uk W: cambridgeflying group.co.uk

Types:

2 x de Havilland Tiger Moth 1 x Fuji FA 200

#### **CITY OF LONDON**



#### UK FLYING CLUBS LTD

86-90 Paul Street, London, EC2A 4NE E: dan@eglk.co.uk W: eglk.co.uk UK Flying Clubs (Blackbushe Flying Group) was set up in 2014. The fleet of 22 aircraft now includes Cessna 150s, a Reims Cessna 172, a Cessna 182, PA-28 Archer III, a Piper Arrow III, a multi-engined Piper Seneca Turbo, Beech Duchess and Beech Baron. We currently operate from three UK bases (Blackbushe, Bournemouth and Nottingham), making us the largest non-equity aircraft hire club in the UK and we plan to continue growing for as long as there is demand. We intend to develop the group in a sensible manner so that members can benefit from flying a variety of aircraft within one monthly membership. That's what makes us unique and popular amongst our members. AOPA members get 10% off the monthly or annual membership fee.

CORNWALL

#### Dodmin Airfield

#### CORNWALL FLYING CLUB

Bodmin Airfield, Cardinham, Bodmin, PL30 4BU T: 01208 821419 E: bodminairfield@gmail.com W: bodminairfield.com We are open for experience flights, PPL and LAPL. Our mission is to promote the interests of GA throughout Devon and Cornwall, and to provide a safe, friendly and stimulating environment for members and visitors alike. Pop in and see us; you're guaranteed a warm reception.

#### Types:

2 x Cessna 152 1 x Cessna 172



PERRANPORTH FLYING CLUB LTD Higher Trevellas, St Agnes, TR5 0XS T: 01872 552266 E: perranporthflying club@live.co.uk W: perranporthflying club.co.uk We are a UK CAA DTO offering

Part-FCL ICAO-compliant PPL, night- and IMC-rating training and aircraft hire. We also offer microlight training/hire.

**Types:** Ikarus C42 Piper PA-28 Archer P&M GT-450 flex-wing

#### CUMBRIA

FLIGHT

## CARLISLE FLIGHT TRAINING & CARLISLE AERO CLUB

Hangar 30, Carlisle Airport, CA6 4NW T: 01228 573344 Mob: 07834 559560 E: info@carlisle-flighttraining.com W: carlisle-flight-training.com **Types:** 1 x Piper PA-28 Archer

1 x Piper PA-28 Warrior 2 x Robin HR200-120B

DEVON

#### 3

#### DEVON & SOMERSET FLIGHT TRAINING LTD

Dunkeswell Aerodrome, Honiton, EX14 4LG T: 01404 891643 E: info@dsft.co.uk W: dsft.co.uk Courses offered include PPL, LAPL, IR(R), Night, FIC, Touring Motor Glider (TMG) Rating, Tailwheel, AOPA Aerobatic and Radio Navigation, Farm Strip Flying. ATO Approved.

#### Types:

- 6 x Cessna 152 3 x Cessna 172 1 x Citabria 1 x Piper PA-28 Arrow
- 1 x Piper PA-28 Warrior

ESSEX

#### ANDREWSFIELD AVIATION LTD

Andrewsfield, Stebbing, Dunmow, CM6 3TH T: 01371 856744 E: info@andrewsfield.com W: and rewsfield.com As a licensed airfield, we are able to teach the disciplines necessary for use at a busy airport or private airfield as well as for visiting smaller strips. We also have links with Cambridge and Southend for instrument training. We offer courses from trial lessons to Flight Instructor ratings and CPL training, as well as the Advanced PPL, Formation Flying, Aerobatics and Short Strip courses. Also on offer is a FEAR 2 FLIGHT seminar. Types:

1 x Beechcraft B76 Duchess 6 x Cessna 152 1 x Cessna 172 1 x Piper Cub 1 x Piper PA-28 Warrior 1 x Piper PA-28R Arrow



#### ANGLIAN FLIGHT CENTRES

Earls Colne Airfield, Colchester, CO6 2NS T: 01787 223676 E: enquiries@flyafc.co.uk W: anglianflightcentres.co.uk Based on a licensed airfield, open seven days a week with both tarmac and grass runways, we have a large fleet of aircraft and offer NPPL, PPL, night, IR(R) and aerobatic training. We also run Formation Flying, Advanced PPL, Strip Flying, Taildragger and Infringement Awareness Training. All these courses help towards gaining your AOPA Wings Awards. Home of Anglian Warbirds.

#### Types:

- 1 x Cessna 172 (EFIS)
- 1 x North American T-6 Texan
- 1 x Robin Alpha A120 T
- 4 x Robin HR200
- 1 x Slingsby T-67M-260 Firefly



#### NORTH WEALD FLIGHT TRAINING LIMITED

The Squadron, North Weald Airfield, CM16 6HR E: enquiries@nwft.co.uk W: northwealdflight training.co.uk Based at the legendary ex-RAF airfield that is famous not only as a Battle of Britain base but also as home to 111 Sgn's famous Black Arrows formation team of Hawker Hunters, North Weald Flight Training is a leading provider of flight training in the southeast of England and has an enviable reputation for its airfield facilities, aircraft fleet and experienced instructional staff that all go to help its many students realise their dream of flying an aircraft as a fully qualified pilot.

#### Types:

2 x Cessna 150 5 x Cessna 152 5 x Cessna 172 2 x Piper PA-28



#### SEAWING FLYING CLUB LTD.

Southend Airport, Southend-on-Sea, SS2 6YF T: 01702 545420 E: info@seawingfc.co.uk W: seawingfc.co.uk Seawing Flying Club has now been operating from London Southend Airport for in excess of 40 years. We are the only members-owned flying club at the airport which enables us to offer a fun, friendly and sociable environment in which we provide professional and effective flight training. Seawing Flying Club also has a history of training pilots who have gone on to fly for the Royal Air Force and various airlines worldwide.

#### Types:

2 x Cessna 152 1 x Cessna 172R

#### Stapleford flight centre

#### STAPLEFORD FLIGHT CENTRE

Stapleford Airfield, Romford, RM4 1SJ T: 01708 688380 E: reception@flysfc.com W: flysfc.com Stapleford Flight Centre has been training private and commercial airline pilots for over 45 years. Many of our students have gone on to enjoy a lifetime of 'fun-in-thesky' and others have become flight instructors.

#### Types:

15 x Cessna 152 1 x Cessna 172 2 x Diamond DA40D 1 x Diamond DA40D (Sim) 3 x Diamond DA42 1 x Diamond DA42 (Sim) 8 x Piper PA-28 3 x Piper PA-28R

-

THE TIGER CLUB (1990) LTD

THE TIGER CLUB

Damyns Hall, Aveley Road, Upminster, RM14 2TN T: 01708 524633 E: info@tigerclub.co.uk W: tigerclub.co.uk Founded in 1957 with the aim of encouraging all aspects of sport flying, it offers opportunities to fly vintage aircraft and learn aerobatics and formation flying.

#### Types:

- 2 x de Havilland Tiger Moth 1 x Mudry CAP 10C
- 2 x Piper PA-18-90 Super Cub
- 4 x Rollason D31 Turbulent

GLOUCESTERSHIRE



#### COTSWOLD AERO CLUB

Aviation House SE2, Gloucestershire Airport, Cheltenham, GL51 6SP T: 01452 713924 E: info@cotswoldaero club.com W: cotswoldaeroclub.com Based in the heart of the Cotswolds with easy access from Cheltenham, Gloucester, Bristol, Bath, Swindon and Worcester, Cotswold Aero Club is one of the oldest flying clubs in the UK. It has a professional yet relaxed attitude for flying and learning to fly and offers training for NPPL, LAPL, PPL and associated ratings.

#### Types:

1 x Piper PA-28R 200 2 x Robin DR400 1 x Robin R2112



#### LYNEHAM FLYING CLUB

The Control Tower, Cotswold (Kemble) Airport, GL7 6BA E: enquiries@lyneham aviation.co.uk W: lynehamaviation.co.uk Offers PPL, NPPL, complex, night, IR(R), ground examinations, aerobatics and formation flying. Restricted to military/government employees. Provides training to regular and reserve service personnel (and dependants) and MoD civilians.

Types:

2 x Piper PA-28 Warrior II 1 x Piper PA-28 Arrow 1 x Scottish Aviation Bulldog



#### STAVERTON FLYING SCHOOL

Hangar SE50, Gloucestershire (Staverton) Airport, Cheltenham, GL51 6SP T: 01452 712388 E: info@stavertonflying school.co.uk

W: stavertonflyingschool.co.uk Training aspiring pilots to fly at Staverton. If you're interested in learning to fly, extending your existing qualifications or you just want to get back into flying after a break then you've come to the right place.

Types:

3 x Cessna 152 4 x Cessna 172

#### HAMPSHIRE



#### EURO FLIGHT TRAINING LTD

Fareham Innovation Centre, Merlin House, 4 Meteor Way, Lee-on-Solent , PO13 9FU T: 07836 650357 E: info@euroflight training.com W: euroflighttraining.com We operate modern glass cockpit aircraft and multiand single-engine FNPT2 simulators at Lee-on-the-Solent. We offer LAPL, PPL, CPL, single- and multi-engine IR, MEP and SEP. Approved by UK and EASA.

#### Types:

1 x Cirrus SR20 1 x Diamond DA40 & Sim 1 x Diamond DA42 & Sim 1 x Fuji FA200



#### THE SPITFIRE FLYING CLUB

Popham Airfield, Micheldever, Winchester, SO21 3BD T: 01256 397733 E: pophamairfield@ btconnect.com W: popham-airfield.co.uk Tie downs and overnight camping available, low landing fees, fuel available 24/7.

#### HERTFORDSHIRE

#### Flyers

#### FLYERS FLYING SCHOOL

Elstree Aerodrome, Hoggs Lane, Elstree, WD6 3AL T: 0207 267 9049/07810 597273 E: info@flyersflying school.co.uk W: flyersflyingschool.co.uk We welcome anyone who would like to learn to fly and gain a PPL Licence. In addition we support owners with our aircraft management package, and hirers who just want to enjoy the fruits of all their labours having gained licences and ratings. The school has aircraft available for hiring

and training purposes. Based at Elstree aerodrome, we are superbly placed to serve the north and west London area. We now offer Flight Instructor Courses.

#### Types:

1 x Cirrus SR20 3 x Piper PA-28 1 x Piper PA-28 Glass Cockpit



#### ALOUETTE FLYING CLUB LTD

Building C700, Churchill Way, Biggin Hill Airport,TN16 3BN E: secretary@alouette.org.uk W: alouette.org.uk Alouette is first and foremost a club run by the members, for the members. We have no employees, but instead have a dedicated committee, elected by the members, who are responsible for the general running of the club. This reduces our overheads and allows us to keep the cost of flying down, an all-important consideration in these days of rising prices. Our flying rates are still among the cheapest in the southeast of England! Types:

2 x Cessna 172

#### TG AVIATION

#### T G AVIATION LTD

Lydd Airport, Romney Marsh, TN29 9QL T: 01843 823656 E: info@tg-aviation.com W: tg-aviation.com Family-run, friendly flying school now based at Lydd Airport following the closure of Manston. We offer trial flights, introductory courses, 'get me down' courses and the PPL in our fleet of wellmaintained aircraft. Packages and vouchers available.

#### Types:

1 x Boeing Stearman 2 x Cessna 152 2 x PA-28-161 2 x PA-28R-201

#### LANCASHIRE



#### BAE SYSTEMS FLYING CLUB

14 St David's Rd North, St Annes, FY8 2BS T: 07885 421869 E: secretary@baeflying club.co.uk W: baeflyingclub.co.uk Open to BAE employees only. **Types:** 1 x Cessna 152

1 x Cessna 132

#### Southport & Merseyside Aero Club founded 1951

#### SOUTHPORT & MERSEYSIDE AERO CLUB

Room 2, M8 Shipwright House, Queens Dock Commercial Centre, 67 Norfolk Street, Liverpool, L1 0BG T: 07944 705852 E: secretary@smac.org.uk W: smac.org.uk The club is based at Liverpool Airport and has flying instructors who conduct PPL refresher training and training for the IR(R) and night ratings. **Types:** 

1 x Cessna 172

#### Westair

#### WESTAIR FLYING SCHOOL LTD

Blackpool Airport,FY4 2QS T: 01253 342660 E: school@westair.uk.com W: westair.uk.com We have been operating in Blackpool for over 70 years. Courses offered include CPL, PPL, LAPL, NPPL, FI (R), IR(R), night and multi- and we also offer renewals at an affordable price with quality instruction. We also provide maintenance at Blackpool and Barton.

#### Types:

Boeing 737 (Sim) Cessna 150H Cessna 152 Cessna 172S Cessna F172P Diamond DA40 & DA42 Piper PA-28 Warrior II

#### LEICESTERSHIRE



#### LEICESTERSHIRE AERO CLUB

Leicester Airport, Leicester, LE2 2FG T: 0116 259 2360 E: info@leicesterairport.com W: leicesterairport.com Leicestershire Aero Club offers training for a PPL as well as a range of flying experiences and a whole lot more. The club operates at Leicester Airport and has been at the centre of the Leicestershire flying community for more than a century (since 1909). Types:

#### Types.

2 x Cessna 152 1 x Cessna 152 Aerobat 1 x Cessna 172 1 x Piper PA-28-161 1 x Super Decathlon

#### LINCOLNSHIRE

#### 

#### FENLAND FLYING SCHOOL

Fenland Airfield, Holbeach St Johns, Spalding, PE12 8RQ E: info@fenland-flyingschool.co.uk W: fenland-flyingschool.co.uk T: 01406 540461 Fenland Flying School – based at Fenland Airfield – offers friendly, relaxed and efficient instruction, free of controlled airspace and with outstanding pass rates.

#### Types:

1 x Cessna 172 1 x Robin DR360 1 x Siai Marchetti 205R

#### North Coates Flying Club

#### NORTH COATES FLYING CLUB

Hangar 4, North Coates Airfield, Kenneth Campbell Road, Grimsby, DN36 5XU T: 01472 388850 or 01652 618808 (out of hours) E: stevecharters@gmx.com W: northcoatesflyingclub.co.uk



#### THE POM FLYING CLUB LTD

The Terminal, Humberside Airport, Ulceby, DN39 6YH T: 07985 753336 07711 438999 E: info@gbpom.co.uk W: gbpom.co.uk T: 07985 753336 We train for PPL/LAPL/IMC and night ratings. **Types:** 2 x PA-28-161 Warrior II



#### WICKENBY AERODROME LLP

The Old Control Tower, Wickenby Airfield, Lincoln, LN3 5AX T: 01673 885000 E: info@wickenbyairfield.com W: wickenbyairfield.com Clubhouse facilities. Jet A1 Bowser. 24-hour self-service fuel pump Avgas. Hangarage available. Flying school.

#### NORFOLK

#### AERO

#### OLD BUCKENHAM AERO CLUB

Old Buckenham Airfield, Old Buckenham, NR17 1PU E: info@flyingmadeeasy.co.uk W: oldbuckaeroclub.co.uk T: 01953 860806 A different type of flying school. Our instructors have a wealth of experience and are ready to help you gain your licence or extend your skills. **Types:** 

1 x Cessna 172 1 x Extra 200 1 x Piper PA-28

#### NOTTINGHAMSHIRE

#### SAC

#### SHEFFIELD AERO CLUB

Netherthorpe Aerodrome, Worksop, S80 3JQ T: 01909 475233 E: info@sheffieldaeroclub.net W: flydays.co.uk/airfields/ sheffield-aero-club/ The friendly, experienced instructors and staff are on hand to help you achieve your dreams. We offer PPL and IMC training, aircraft hire, aerobatic training and more. **Types:** 

#### rypes.

1 x Cessna 172 (use of) 6 x Cessna 152

#### OXFORDSHIRE



#### RAF BENSON FLYING CLUB LTD RAF Benson, Wallingford, Oxford, OX10 6AA E: opsmgr@rafbfc.co.uk W: rafbfc.co.uk Exists to provide flying training and low-cost flying to members of the armed forces. This includes the RAuxAF and the Reserves, Volunteer Reserves, Cadets and former members of all three services. Members of overseas forces serving with the British in the UK are also welcome. Courses offered include PPL, NPPL and IMC and we are ELCAS registered for Enhanced Learning Credits.

Types:

2 x Piper PA-28 3 x Slingsby T67 Firefly

## Take Flight

#### TAKE FLIGHT AVIATION LTD

Enstone Airfield, OX7 4NS T: 01608 695896 E: admin@takeflight aviation.co.uk W: takeflightaviation.co.uk Aircraft hire without limits. An exclusive private aviator's club and training venue offering one-to-one instruction.Quality aircraft hire to members without usual restrictions. PPL, LAPL, IMC, night, Safety Pilot and AOPA aerobatics.

#### Types:

Cessna 152 Cessna 172S Piper PA-28-160 Piper PA-28-180 Piper PA-46 Malibu Matrix

## Take Flight

#### TAKE FLIGHT AVIATION LTD

London Oxford Airport, Kidlington, OX5 1RA T: 01865 236424 E: admin@takefligh taviation.co.uk W: takeflightaviation.co.uk Aircraft hire without limits. An exclusive private aviator's club and training venue offering one-to-one instruction. Quality aircraft hire to members without usual restrictions. PPL, LAPL, IMC, night, Safety Pilot and AOPA aerobatics.

#### Types:

1 x Beech B76 Duchess 3 x Cessna 152 1 x Cessna 152 Tailwheel 1 x Cessna 172S 1 x Piper PA-28 140 1 x Piper PA-28 160 2 x Piper PA-32 Saratoga 6X 1 x Piper PA-46 Malibu Matrix\* 4 x Slingsby T67 Firefly \*fractional ownership required

#### SHROPSHIRE



#### SHROPSHIRE AERO CLUB

Sleap Aerodrome, Harmer Hill, Shrewsbury, SY4 3HE T: 01939 232882 E: info@shropshireaero club.co.uk W: shropshireaeroclub.co.uk With two large runways, open airspace, a friendly and relaxed bustling atmosphere, Sleap Airfield is a superb destination for pilots and students alike. There's a bistro, museum and the UK's cheapest Avgas, always. Club aircraft all have touchscreen Garmins, tidy interiors and some of the best hourly prices.

- Types:
- 1 x Aviat Husky 4 x Cessna 152
- 1 x Cessna 172 SP
- 2 x Piper PA-28 Archer
- 1 x Tecnam 2002 JF

#### SOMERSET

#### SAIRBORNE

#### AIRBORNE SERVICES LTD

Henstridge Airfield, The Marsh, Templecombe, BA8 0TN T: 01963 365728 E: mail@yakovlevs.com W: yakovlevs.com Incorporating the Yakovlevs six-ship formation team. In addition to the display team, we offer PPL, aerobatics and formation training and supply aircraft parts, avionics, and GA consultancy services.

#### Types:

5 x Yakovlev Yak-50 3 x Yakovlev Yak-52



#### YEOVILTON FLYING CLUB

Kyte Green, Ditcheat, Shepton Mallet, BA4 6RA Tel : 01749 860461 E: membership@flyyfc.com W: flyyfc.com Yeovilton Flying Club is a group comprising serving members of HM forces and ex-service personnel and other entitled members either working at or closely involved with RNAS Yeovilton. It is an accredited training provider and provides economical recreational flying.

#### **Types:** 1 x Robin DR 400

1 x Socata TB10 1 x Slingsby T67 Firefly

**STAFFORDSHIRE** 

#### Aviation

#### TATENHILL AVIATION LIMITED Tatenhill Airfield, Newborough Rd, Needwood,

Newborough Rd, Needwood, Burton-on-Trent, DE13 9PD T: 01283 575283 E: office@tatenhill.com W: tatenhill.com Founded in 1987 with the intention of serving aircraft owners/operators with an approved maintenance facility at a competitive cost, we have built up a reputation for quality and excellence, offering many services on-site including pilot training, aircraft hire and maintenance as well as avionics design/installation. **Types:** 

- 1 x Bellanca Decathlon
- 4 x Cessna 152
- 1 x Cessna 152 Aerobat
- 1 x Cessna 172
- 1 x Piper PA-28 Archer
- 1 x Piper PA-28 Warrior

#### SURREY

#### blackbushe aviation

#### BLACKBUSHE AVIATION LTD

Blackbushe Airport, Camberley, GU17 9LB T: 01273 877727 E: info@blackbushe aviation.com W: blackbusheaviation.com A thriving flying school and club with an exciting growth plan. We have ATO status for PPL, CPL and FI courses and are approved to conduct IR and multi-engine training.

#### Types:

- 2 x Cessna 152 1 x Cessna 152 Aerobat 1 x CZAW PS28 Cruiser 1 x Piper PA-28 Archer 1 x Piper PA-28 Warrior 1 x Piper PA-34 Senaca 200
- 1 x Socata TB20



#### CUBAIR FLIGHT TRAINING LTD

The Old Squash Court, Redhill Aerodrome, RH1 5JY T: 01737 822124 E: ops@cubair.co.uk W: cubair.co.uk Cubair Flight Training is a long-established, not-for-profit organisation with the aim of promoting leisure aviation. We are a friendly flying school specialising in flying training for the PPL and associated ratings, including tailwheel training. As we are not driven by the need for profit we are able to offer an individual service to our students with time to complete proper briefings and for our

instructors to attend to a student's particular needs. **Types:** 

#### 4 x Diamond DA20

- 1 x Diamond DA40
- 1 x Piper PA-18 Super Cub
- 1 x Piper PA-28 Warrior II
- 1 x Slingsby T67M Firefly

#### Redhill Aviation

#### REDHILL AVIATION FLIGHT CENTRE

Redhill Aerodrome, RH1 5JY T: 01737 822959 E: redhillaviation@aol.com W: redhillaviation.co.uk Redhill is one of the UK's oldest purpose-built, licensed aerodromes. It has grass and tarmac runways, full ATC and is open 0900–1700 during winter and 0900–1900 during the summer (extensions available).

#### Types:

- 1 x Beech 76 Duchess
- 5 x Cessna 152
- 1 x Cessna 152 Aerobat
- 1 x Piper PA-28-181 Archer
- 1 x Piper PA-28R-200 Arrow
- 1 x Piper PA-34-220T Seneca

## SUSSEX

#### FLIGHT PERFORMANCE TRAINING LTD

Hangar 7, Brighton City Airport, Shoreham, BN43 5FF T: 01273 569111 E: ops@fptuk.com W: fptuk.com The leading cause of fatalities in commercial aviation is Loss of Control In Flight. We specialise in Upset Prevention and Recovery Training (UPRT) and take a holistic approach that incorporates theoretical training. We also offer SEP renewals, aerobatic ratings, PL training and Fl courses.

#### Types:

1 x Piper PA-28 1 x Slingsby T67M Firefly

# POOLEYS

#### - EST. 1957 -

## **Official Dealer for Bose & Garmin**



#### www.pooleys.com

Freephone: 0800 678 5153 | Email: sales@pooleys.com | Web: www.pooleys.com



#### **GOODWOOD FLYING SCHOOL**

Goodwood Aerodrome, Chichester, PO18 0PH T: 01243 755066 E: flyingschool@ goodwood.com W: goodwood.co.uk/flying/ Based on the famous Goodwood estate, close to the motor racing circuit and horse racing course, Goodwood Flying School has been operating for 40 years and operates from one of the UK's nicest grass aerodromes. We offer high-class training in a number of courses.

#### Types:

4 x Cessna 172SP (G1000) 1 x Piper PA-18 Super Cub 1 x North American T-6 Texan

#### **GRIDLINE ENGINEERING**

23 Cove Road, Rustington, Littlehampton, BN16 2QW T: 07801 068013 E: rhwheeler@aol.com W: gridline.co.uk PPL and microlight DTO operating out of Goodwood and Lee-on-Solent using Cessna, Ikarus, Piper and Robin types.



#### **ULTIMATE HIGH ACADEMY**

Goodwood Aerodrome, Chichester, PO18 0PH T: 01243 913916 E: info@ultimatehigh.co.uk W: ultimatehigh.co.uk The Ultimate High Academy offers all AOPA aerobatic courses. Its extensive range of instructors are highly experienced ex-military pilots with hundreds of hours of flying in aerobatics experience.

#### Types:

1 x Extra 300L 3 x Slingsby T67 Firefly

#### WARWICKSHIRE

#### Coventry Aeroplane Club

#### COVENTRY FLYING SCHOOL LTD

Rowley Road, Baginton, Coventry, CV3 4FR T: 02476 301428 E: operations@covaero.com W: covaero.com We offer a range of licence and rating types from the EASA PPL to the LAPL and the AOPA Flying Companions Course. Once you've got your licence, you can add to it with night or IMC/IR(R) ratings, which allow you to fly in some of our more-challenging British weather.

#### Types:

2 x Piper PA-28 161 Warrior III

#### Ou-Trackt

#### **ON-TRACK AVIATION LTD**

Unit 2, Lowes Lane Business Park, Walton Rd, Wellesbourne, CV35 9RB T: 01789 842777 E: info@ontrackaviation.com W: ontrackaviation.com We specialise in part- and fulltime Instructor and Examiner courses on both land and seaplanes. In addition, we can offer FAA conversions/ renewals/BFRs.

#### Types:

4 x Cessna 152 1 x Cessna 172 1 x Cessna 172 Amphibian 1 x Diamond DA42 1 x Piper Cub 5 x Piper PA-28 1 x Robin 2160



#### SOUTH WARKS FLYING SCHOOL

Loxley Lane, Wellesbourne Mountford, CV35 9EU T: 01789 840094 E: ops@south warwickshireflyingschool.com W: southwarwickshire flyingschool.com Whether your interest is in being a private or an airline pilot, our personal

development and training will be of invaluable assistance in helping you reach your goal. We offer training at all levels from PPL to IR(R), night and radio licences, all on either a full- or part-time basis. The school's location is ideal for flight training, and time and money are saved by not having to wait at the runway because of commercial traffic.

#### Types:

- 4 x Cessna 152
- 1 x Cessna 172
- 1 x Cessna 177RG Cardinal
- 1 x Frasca 101G Flight Sim
- 1 x Piper PA-28 Warrior
- 1 x Piper PA-28R Arrow

WEST YORKSHIRE



#### SHERBURN AERO CLUB LTD

Lennerton Lane, Sherburn-in-Elmet, LS25 6IE T: 01977 682674 E: flightdesk@ sherburnaeroclub.com W: sherburnaeroclub.com As well as being a flying club, Sherburn Aero Club has a long history of flight training. Whether you are completely new to flying and want to have a trial flying lesson or want to do your Private Pilot's Licence (PPL) or Commercial Pilot's Licence (CPL), or want to renew some of your flight training skills or qualifications, then Sherburn is the place to come. Here at Sherburn Aero Club we are passionate about flight training and want each and every person who chooses to train with us to have the very best experience possible and to achieve their flight training goals. Sherburn Aero Club also has a thriving social scene with regular meetings in the wellappointed clubhouse. Types:

3 x Aero AT-3 3 x Piper PA-28 Cadet 3 x Piper PA-28 Warrior 1 x Robin 2160

#### WILTSHIRE



#### **BUSTARD FLYING CLUB**

MoD Boscombe Down, Amesbury, SP4 0JF T: 07982 075922 E: cirvine358@outlook.com W: bustardflyingclub.co.uk The Bustard Flying Club exists to stimulate air-mindedness and to encourage a practical interest in, and knowledge of, flying among the staff at MoD Boscombe Down and other eligible personnel linked to the MoD and QinetiQ. The club provides PPL training and has aircraft available for hire by members.

#### Types:

1 x Robin DR400-140 1 x Slingsby T-67M Firefly

#### WORCESTERSHIRE

#### AIR MIDWEST **AIR MIDWEST**

Unit 3 West, Wolverhampton Business Airport, Bobbington, Stourbridge, DY7 5DY T: 01384 221777 E: operations@airmid west.co.uk W: airmidwest.co.uk Based at Halfpenny Green/ Wolverhampton Business Airport, students receive the highest standard of training delivered in a relaxed, friendly manner by our flight instructors who will adjust their training styles to your own particular needs in a professional and effective manner. Already have a licence? Why not increase your skills and knowledge base with some advanced training, from the night rating, to the Instrument Rating (R) to operating complex aircraft. These will enable you to rent different aircraft and fly further afield in comfort.

#### Types:

1 x Cessna 152 1 x Grob 115 1 x Slingsby T67 Firefly

#### WALES



#### MONA FLYING CLUB

RAF Mona, Gwalchmai, Holyhead, LL65 4RS E: flymona@btinternet.com W: flymona.com T: 01407 720581 Croeso i Clwb Hedfan/ Welcome to Mona Flying Club! Mona Flying Club is located halfway between Bangor and Holyhead on the Isle of Anglesey under the shadow of the beautiful Snowdonia mountains. If you're interested in learning to fly, this is one of the ideal places to do it. We have always taken pride in our relaxed, friendly atmosphere, and the high quality of our teaching. From trial lessons (vouchers available) to UK or EASA PPL, night rating or IR, please get in touch. Diolch. Types:

1 x Cessna 152

#### GLAMORGAN

CAMBRIAN AERO

#### CAMBRIAN AERO TRAINING

Navigation Park, Abercynon, CF45 4SN E: fly@cambrian-aero.co.uk W: cambrian-aero.co.uk T: 01443 801526 Offering training opportunities from microlights, self launching motor gliders and singleengine aircraft to tailwheel, instrument and seaplane ratings as well as helicopter ground school. We offer aviation theory courses and CAA exams and specialise in foreign licence conversion, IR(R) training as well as converting from microlights and gliders to NPPL, LAPL(A) and EASA PPL(A). We also train in Spain and Portugal. Types:

#### ypes.

Evektor EV97 EuroStar Ikarus C42 Grob 109 Piper PA-28

#### **OVERSEAS**

#### HONG KONG AVIATION CLUB

31 Sung Wong Toi Road Kowloon, Hong Kong T: (852) 2713 5171 E: gm@aviationclub.hk W: aviationclub.hk **Types:** Cessna 152 Cessna 172M, R, S Cessna 182P Robinson R22 Robinson R44

#### AOPA UK IS YOUR CLUB AN AOPA CORPORATE MEMBER YET?

AOPA is the world's largest and most influential GA membership association, with organisations in 72 countries. Whilst each national AOPA is an independent organisation, they all belong to the International Council of Aircraft Owner and Pilot Organisations (IAOPA).

Through IAOPA, we have direct representation at ICAO, where aviation standards and recommended practices originate. In Britain, AOPA UK directly represents GA at government and regulatory levels. No other UK GA organisation has the direct reach that AOPA UK does. By far the majority of our operating costs are met by membership fees from individual members and businesses who see the benefit of our work. There is no obligation or compulsion to join AOPA UK, unlike some other aviation organisations and associations, yet all of the GA community benefits from the successes resulting from our engaging with and influencing regulators, politicians, government departments and local authorities. To find out more visit aopa.co.uk/ membership/corporatemembership

## **OTHER ORGANISATIONS**

#### AEROBILITY

Terminal, Blackbushe Airport, Camberley, GU17 9LQ T: 0303 303 1230 E: frontdesk@aerobility.com W: aerobility.com Aerobility provides anyone with any disability, whatever the impairment, with the opportunity to learn to fly and participate in aviation-based activities. Flight training is available at Blackbushe and Tatenhill Airfield, with support and advice available to all aspiring disabled aviators around the UK.

#### Types:

Piper PA-28\* Piper PA-32 Cherokee Six Tecnam P2002-JF\* \*these aircraft have been modified with hand controls but can also be flown by ablebodied pilots.

#### ADAMS AVIATION SUPPLY LTD

Mercury House, Vulcan Way, Croydon, CR0 9UG T: 01689 842999 E: mail@adamsaviation.com W: adamsaviation.com Stocks and distributes widest range of aircraft parts in Europe. Multilingual team of aviation equipment experts

#### AIR SEARCH

Jasmine House, Jasmine Grove, Anerley, SE20 8JY T: 0208 778 7531 W: airsearch.uk A voluntary organisation made up of pilots, observers and ground crew who donate their time and aircraft free of charge. Our primary function is to provide 'eyes in the sky' free of charge to help the emergency services and local authorities fullfill their humanitarian, statutory or community role. We work with the police, fire service, ambulance service, HM coastguard, local council authorities, national government departments and other organisations such as resilience forums, Highways England, the Environment Agency, the RNLI, Network Rail and voluntary groups.

#### AIRPLAN FLIGHT EQUIPMENT

Unit 1A, Ringway Trading Estate, Manchester, M22 5LH T: 0161 499 0023 E: sales@afeonline.com W: afeonline.com "Europe's favourite online pilot shop." At AFE we never forget that we are only as good as the service we offer to you, our customer. The people at AFE are aviation junkies who know and love flying and aeroplanes, many of us are pilots or experienced aviation professionals. It is our understanding of the products we sell and the aviation world itself that sets us apart from the crowd and makes our customers want to come back to us time after time when they need the highest quality aviation products and services at a competitive price.

#### **B17 PRESERVATION LTD**

PO Box 92, Bury St Edmunds, Suffolk, IP28 8RR T: 01638 721304 E: b-17preservation@ W:sallyb.org.uk Operator of *Sally B* – the last airworthy Second World War-era Boeing B-17G Flying Fortress bomber remaining active in Europe.

#### BLACKBUSHE AIRPORT

Terminal Building, Camberley, Surrey, GU17 9LQ T: 01252 471300 W: blackbusheairport.co.uk Located on the borders of Hampshire, Berkshire and Surrey, Blackbushe is perfectly located for quick access to London as well as Thames Valley and the south of England. We have schools for fixed-wing and helicopters onsite and if you are an aircraft owner or flying group, our landing fees are competitive and the facilities are superb.

#### BRITISH MEDICAL PILOTS ASSOCIATION

The Control Tower, City Airport Manchester, Manchester, M30 7SA T: 0208 7677 8081 E: secretary@bmpa.org.uk W: bmpa.org.uk An organisation for doctors and affiliated professionals who are pilots or aviation medical examiners. It aims to promote safe practice in aviation and medicine by sharing knowledge in these areas in a friendly and supportive environment.

#### CAVOK LIMITED

3 Latymer Close, Weybridge, Surrey, KT13 9ER T: 01932 821905 E: info@qudiem.com W: qudiem.com CavOK's CloudBaseGA online application supports all operations including Aircraft/Instructor scheduling, automatic flight log recording and engineering logs, tech log and comprehensive invoicing.

#### CRANFIELD AVIATION TRAINING SCHOOL (CATS)

110 Butterfield,Luton, LU2 8DLT: 01582 434222E: info@catsaviation.comW: catsaviation.comProvider of aviation training and training materials.

#### E-PLANE

1 Sandson Grove, Tunbridge Wells, Kent, TN2 4RW T: 07802 902535 E: e-plane@live.co.uk W: sandtoft-airfield.com Hangarage (Sandtoft), Avgas, maintenance (Sandtoft and Fenland) including TBM, LAA, avionics, complex repairs.

#### FLYING FARMERS ASSOCIATION

Brooker Farm, New Church, Romney Marsh, TN29 ODT E: acragg@brookerfarm.co.uk W: ffa.org.uk An association of over 400

farmers who fly, along with people working in agriculturalbusinesses. Most members own or operate airstrips.

#### HISTORIC AIRCRAFT ASSOCIATION

The White House, 23 Mill Road, Huntingdon, PE29 1YJ T: 07792 659553 E: info@haa-uk.aero W: haa-uk.aero Founded with the aim of furthering the safe flying of historic aircraft in the UK and supporting the restoration/ preservation of such aircraft.

#### HISTORIC ENGLAND

The Engine House, Fire Fly Ave, Swindon, SN2 2EH T: 01793 414703 E: damian.grady@englishheritage.org.uk W: historicengland.org.uk Undertakes aerial photography of archaeological sites and historic buildings.

#### MONTCLARE SHIPPING CO LTD

Elstree Aerodrome, Borehamwood, WD6 3AR T: 0208 9537480/9533502 Aerodrome operator.

#### POOLEYS FLIGHT EQUIPMENT

Elstree Aerodrome, Borehamwood, WD6 3AW T: 0208 207 3749 E: sales@pooleys.com W: pooleys.com

Pooleys has been providing flying and navigation equipment to the global aviation industry for seven decades. Pilots in all flying disciplines benefit from Pooleys' expertise in supplying an extensive range of flight equipment to meet any specification, including bespoke equipment requirements. Pooleys now provides a range of over 2,700 products including aviation's most recognisable brands. We now supply training products to over 95% of UK flying schools.

#### ROYAL INSTITUTE OF NAVIGATION

1 Kensington Gore, London, SW7 2AT T: 0207 591 3130 W: rin.org.uk

#### SKYANGELS AIR AMBULANCE

The Comet Building, Airport Way, Solihull, B92 0EA T: 0844 318 0999 E: airbase@ skyangelsairambulance.org.uk W: skyangelsair ambulance.org.uk International non-profit air ambulance foundation.

#### SOUTHERN AIRCRAFT CONSULTANCY

Office 3, Earsham Hall, Earsham, Bungay, Suffolk, NR35 2AN T: 01986 892912 E: info@southernaircraft.co.uk W: southernaircraft.co.uk Register your aircraft on the FAA 'N' Register with complete confidence. We have been operating a friendly, competitively priced professional service for more than 20 years.

#### SYWELL AERODROME LTD

Hall Farm, Sywell Aerodrome, Northants, NN6 0BN T: 01604 801620 E: info@sywell aerodrome.co.uk W: sywellaerodrome.co.uk Owns and operates a historic airfied regarded as one of the best GA fields in the UK. Sywell provides facilities for flight training, corporate charter, maintenance and leisure flights. There is a hotel with bar, restaurant and conference facilities.

Types:

Aero AT-3 Cessna 172 Piper Chieftan

#### TRUSTFLIGHT JERSEY LTD

1st Floor, Forum 4, Grenville St, St Helier, Jersey, JE2 4UF T: 0330 229 0219 E: info@trustflight.io W: trustflight.io Maintenance is largely carried out using disconnected paperfocussed processes which haven't changed in years. We are building the tools and services to unlock a new level of efficiency and safety. From our inception, TrustFlight has been ingrained in the aviation industry. Originally founded by two commercial pilots, we have now grown to become a global organisation supporting a wide variety of airlines, airports, maintenance providers and regulators. Core to TrustFlight is its extremely passionate team of technical aviation and software leaders, who enable us to create the best-in-class tools and services.

#### WINGLY

97 Rue Oberkampf, Paris 75011, France T: 07784 525646 E: info@wingly.io W: wingly.io Wingly is the trusted aviation community that connects private pilots with passengers to share the magic of a flight. Thanks to flight sharing, both pilots and passengers can share the costs and enjoy the perks of taking part in private aviation activities.

## SOME SALIENT ADVICE FROM THE AOPA TEC

The UK Airprox Board and the AOPA Training and Education Committee have issued some useful reminders for pilots to consider when returning to flight after the coronavirus restrictions are lifted

#### WE ALL hope that the spring weather allows us to return to the skies as soon as the restrictions are lifted, but it is worth remembering that it's not just fixed-wing and helicopter pilots itching to get back into the air.

Hang-glider, paraglider and glider pilots will also be eager to 'slip the surly bonds of earth' and embrace any favourable conditions. We all know to avoid the gliding and parachuting sites that are marked on our charts but UKAB – on which AOPA has representation for the GA community – and AOPA TEC are also urging pilots to avoid flying close to hills, whenever possible. Hills and cliffs are premium soaring locations for hang-gliders and paragliders and will also be a target for cross-country glider pilots looking for lift.

#### **'T' IN A CIRCLE?**

When was the last time you studied the legend on your aeronautical map? Sure, we all get a new chart when it's updated and use it to plan our trips, but have you noticed any changes lately? What about that circular symbol with the letter T' in the middle?

With the relatively recent rule change to allow training to take place at unlicensed airfields this new symbol is replacing some ATZ markings and informs pilots that there is likely to be a lot of training aircraft in the vicinity of the field. It would make sense to call the relevant unit to advise them of your location and intentions and to learn what traffic is in the area.

#### **SOFT OR HARD?**

With spring in the air the grass is growing quickly and looking lush. However, there has been a lot of rain recently and the soil might not be as firm as it should be. Furthermore, the lockdown restrictions have drastically reduced the number of movements at most airfields, so areas that would normally be rutted by repeated use may not seem so bad at the moment. Just because they don't 'look' boggy does not necessarily mean they are safe to use though. You may be one of the first to taxi across that area in a long time and it could be your aircraft that gets bogged in. Conversely, some grass strips benefit from regular traffic flattening out undulations and keeping the ground compressed. AOPA TEC is therefore suggesting you consider using GASIL safety factors for wet or long grass when calculating your aircraft's take-off performance. It would be wise to have a mental 'marker' in the back of your mind about when you would abort the take-off if the aeroplane isn't accelerating as quickly as you remember it doing previously!

If you need to abort, do so in plenty of time to account for any slipping in the wet conditions.



Is that grass as firm as it seems? With such little use this winter it might be softer than you think.

#### SO MANY QUESTIONS ...

At risk of bombarding you with questions: Are your spare glasses with your headset? How about sanitiser and face mask? Try using your headset with a mask. Is your chart/electronic equipment up-to-date? Has the equipment in the club aircraft changed? Do you know how to use it?

Airspace changes have occurred in the last year – are you familiar with them? Have you checked (with the flying club if appropriate) that the aircraft's maintenance is still up to date and valid? When did the aircraft last fly? How old is the fuel? Check the fuel drains don't contain 100% water. Do you remember the smell? How about the colour? Is it appropriate to your aircraft? (Remember many refuellers have been on furlough too and mistakes can be made ... AVTUR may have been put in when it should have been AVGAS or vice versa). Have a good look at the aircraft. You might see the possible bird's nest but what about mice? is there any evidence of them?

#### **KEEPING YOUR EYES OUT**

When pilots have not flown for a while there is a tendency to keep your eyes in the cockpit, so it is imperative that you maintain a good look-out. This is especially relevant in the early post-lockdown days when it is likely that the skies will be very busy with others taking the opportunity to fly after the hiatus.

It is also worth considering that not all airfields will be opening immediately after the resrictions are lifted. Others have stated publicly that they will not be accepting visiting aircraft for the first couple of weeks, presumably to free up circuit slots for use by their based pilots to refresh their skills. With this in mind it is essential pilots thoroughly read NOTAMs and call ahead to confirm the status and operating hours of any airfields you plan to visit. Fly safe. *With thanks to George Capon* 

## We could say a lot about this headset, but we think pilots say it best.

"Looking forward to years of enjoyment with these. Very comfortable." - Evan, Ontario, Canada "Needed a lighter, more comfortable fit. Love my DC ONE-X!" - Kurtis, Southwest Airlines

"This is one outstanding headset." - Andrew, Nashville, TN "I found the headset to be far more comfortable than Bose... very happy with the quality." - Matt, American Airlines "They are bulletproof. Quality you simply don't find in most products of any kind these days." - Lynnwood, Dresser, WI "I was impressed with the ANR and comfortable enough that I felt I could wear it for several hours." - Tom, Beavercreek, OH

"Flight instructor let me try it and I liked it better than Bose" - William, Savannah, GA

"GREAT product, perfect performance and comfort." - Coleman, Conyers, GA

"Your reputation and the quality craftsmanship of your products made it a no-brainer in choosing the DC ONE-X!"

- David, Cape Girardeau, MO

"I would buy the DC ONE-X over Bose A20 any day of the week." - Paul, Saratoga Springs,UT

"Love the headset. Have recommended it to other student pilots." - Jayme, Miami, FL "Outstanding value and performance" - Charley, Global Flying Group

> "Excellent noise cancelling ...almost completely reduce low pitch hum of the aircraft. I now can hear all the radio calls and seemingly less fatigued."

- David, Chesapeake, VA

"Great headset, prefer to Bose." - Patrick, South Africa



We asked pilots why they purchased the DC ONE-X. They obviously had a lot to say. The DC ONE-X is the best value, most comfortable, premium ANR headset in aviation. But we're really waiting to hear from you. Purchase a DC ONE-X and take advantage of our 'Fly it Free', 30-Day Money Back Guarantee. We think you'll agree.

For more information and to find the UK dealer nearest you, visit **www.davidclark.com**.







WWW.DAVIDCLARK.COM

# California Dreaming

With the UK lockdown still lingering and 'flying for fun' still off the table (at least for a little while longer), **Charlotte Bailey** revisits a 2018 trip to **Sonoma, California**, and takes to the sky in a Piper Clipper

WORDS Charlotte Bailey IMAGES Steve Bridgewater

aiden LOCK HAVEN

OOKING FOR a relaxing vacation filled

with sun, sea or sky? With its reputation for glorious weather, happy-go-lucky attitudes and a relaxed outlook, California - the 'Golden State' - can certainly offer all of the above, whether it's

#### riding the surf on the Californian coast or soaking up sunshine on the beach.

However, if chasing clouds appeals more than catching waves, don't be disappointed. In late 2018, AOPA's editor and I took a trip to sample the sprawling vineyards of the Sonoma Valley – best viewed from a few thousand feet up.

#### ROAD TRIP

Our journey began by road: a journey of some 600 miles which started on the infamous Las Vegas Strip, easing out into busy traffic, the west coast set firmly in our sights. In all honesty, it had been a whirlwind week. Attending the International Council of Air Shows (ICAS) conference in Las Vegas, I'd been overwhelmed by a multitude of neon lights and late nights – somehow managing to maintain productivity despite the distractions of a black-tie ball (well, somebody had to do it); not to mention the charming conversation of the US Navy Blue Angels, who much amused me with their address of "ma'am".

Blinking in the daylight outside the casino's eternal evening, and with a few days to spare before we were due back in Blighty, I decided to do what any aviation enthusiast would do: swap exhibition hall for hangar and indulge my interest outside the confines of an indoor symposium. (After all, I even had the right outfit with me - one day of the conference had stipulated a dress code of 'Wear Your Flying Suit', which was certainly a surreal attire to wear whilst strolling through a casino.)

The plan involved an impromptu rented Dodge Charger and a brief stop in Oakland before calling in to see some friends at Sonoma Skypark, a small airfield in the heart of southeastern Sonoma County, in the northern region of the San Francisco Bay Area. Situated around 30 miles north of San Francisco itself, Sonoma enjoys a Mediterranean climate with hot summers and cool winters – and on the day we visited, the weather couldn't have been clearer.

#### WINE COUNTRY

Sonoma County's main 'claim to fame' is arguably its wineproducing prowess. The most diverse wine-growing region in the USA, and three times the size of neighbouring Napa County, Sonoma encompasses thirteen distinct 'areas' (formally known as 'appellations'). Expanses of rolling hills – from the Sonoma mountains to the Pacific shore – boast almost 60,000 acres of lush vineyards, tended by more than 425 wineries.

Yet tempting though it was to sit and savour a bottle of Sonoma's best-selling Chardonnay beneath a brilliant blue sky, our immediate attention was elsewhere: the local airfield.

#### SONOMA SKYPARK

Although not as varied as the region's wine list, Sonoma nevertheless offers a few options to get airborne. Sonoma County Airport is the largest, with 329 aircraft including commercial carriers such as United and American - based there. For the private pilot, Sonoma Valley Airport is a privately-funded publicuse aerodrome boasting 121 light aircraft. However, on the opposite side of the road sits Sonoma Skypark, which opened in 1946 and was our destination for the day. At the time of our visit, the Skypark

"The Clipper was beautifully painted in sky blue and cream and modified with a clear canopy in place of the usual cockpit roof "

was the permanent home of 61 light aircraft – almost exclusively single-engined – and one helicopter.

Sonoma Skypark is privately owned by 50 members of the local community, a group whose passion and pride is readily conveyed through a number of engaging and inspiring projects they participate in. Chartered in 1992, members of Chapter 1268 of the Experimental Aircraft Association (EAA) hold monthly meetings; over 60 participants also volunteer their time and skills to youth engagement projects such as the Air Explorers and Young Eagles. You can be sure of a warm welcome and an interesting conversation!

#### PRESTEN'S PIPER

Our host for the day was Eric Presten of Presten's Aero Photography, who took us 'under his wing'. Eric is a pilot, author and photographer whose expertise in air-to-air pictures is justifiably soughtafter. His 'cameraship' of choice is his Piper Clipper, beautifully painted in sky-blue and cream, modified with a clear canopy in place of the cockpit roof so as to afford better visibility. Tucked in his treasure trove of a hangar, I also spotted a set of skis and floats interchangeable footwear for the travelling photographer's aircraft. Eric even has a set of multi-wheel landing gear designed by Art Whitaker. Before the oversized, lowpressure 'tundra' tyres came along this was thought to be an answer for landing on rough, unimproved terrain.

Amongst the extensive family of aircraft that Piper has manufactured since 1930, one production model in particular stands out as a rarity. The Piper PA-16 Clipper is an unusual little aeroplane; following on from the success of the PA-15 Vagabond, it is a high-wing, fabric-covered, fixedgear taildragger with a control column instead of a yoke.

Only 736 Clippers were ever built, and all of those in a single year: 1949. Legend has it that PanAm – whose seaplanes were also designated the 'Clipper' – took umbrage at the name and threatened to sue. As such, Piper's updated version became the PA-20 Pacer instead. Perhaps such relative rarity accounts for only two examples of the Clipper currently being on the UK civil register.



Sonoma Raceway – a road course and drag strip located at Sears Point in the southern Sonoma Mountains



California's Sonoma Skyport, seen during an overhead join after an enjoyable aerial tour of the surrounding vineyards

\$2,995 'new' in 1949 – with blue trim as standard – the Clipper remains popular today. NC 5 8

Para

1

PRESTEN'S

Chasing our shadow down the river. Does life get any better?

### 38 COVER STORY California Dreaming

The Clipper cockpit is about as spartan as they come; no frills, no fuss

MP

#### **CROCS AWAY**

An invitation from Eric to see those rolling vineyards from the air was readily accepted. Allowing for a maximum takeoff weight of 748 kg, the Clipper is a four-seat aeroplane, making it perfect for taking your editor along in the back.

In keeping with its authentic origins, this Clipper's avionics remain noticeable by their absence. Likewise the lack of electrics meant it was started by the 'arm-strong' method, plus there was no intercom and only a handheld radio. Given that this was the first time the editor had experienced my hand at the helm, perhaps this was fortuitous – any screams were soon silenced by a cacophony of cockpit noise from the Lycoming 0-235.

Rolling down the Skyport's more than ample 756 m Runway 08, the Clipper's 480-mile range seemed superfluous. As the Sonoma Valley spread out below us, 'going somewhere' seemed secondary to just being in that unadulterated expanse of sky – especially after the glitz, glam and grime of Vegas.

As I handed back control, our maximum cruise speed of 102 kts was quite sufficient to allow us to 'intercept' and shadow a bright yellow Fairchild Argus, Eric's formation flying having been honed by years of photographic missions.

Then came the real treat; breaking away, we dived down to follow the course of a river, "The Clipper's avionics remain noticeable by their absence and the lack of electrics meant it was started by the 'arm-strong' method"

our wheels barely a foot from the water – Eric explaining that were it not for the submerged crocodiles easily mistaken for logs, we'd be touching our tyres on the surface.

Yes, you read that right ... crocodiles in California. It is not an animal normally associated with the State but an ever growing population of feral 'crocs' are thought to have descended from escaped/ released pets.

#### **MEETING 'JENNY'**

Safely down on the ground, the warm welcome continued from the Skypark community. Every Saturday, a barbeque is organised in aid of the EAA Young Eagles programme, where owners and enthusiasts can share stories over a hot dog. We got chatting to one of them; Frank Schelling, who owns an original 1918 Curtiss JN-4 'Jenny' that Eric is also checked out on. Frank

bought the airframe in 1972 and has since restored it to original airworthy condition; it is a time machine of vintage controls with a control column resembling a broomstick. To be invited to sit in the cockpit, running my fingers over exactly one hundred years of history, brought a real sense of significance. Unfortunately, the Jenny's wings were undergoing maintenance, but I was assured she'd be airworthy again before long - surely a sight to see.

Sadly, another long-term resident of the airfield - the Douglas Sleeper Transport - won't be returning to airworthiness anytime soon. Resting in a quiet corner, the curtains in the upper row of windows - behind which bunk beds nestle - have been closed for the last time. (Far more luxurious than the Boeing 787 I'm due to board home the next day, I remind myself.) However, there are still plenty of other propellers swinging into life, as a Howard DGA taxies past us (much to the delight of the editor - who proceeded to give me chapter and verse about the virtues of Bennie Howard's so-called "Damn Good Airplane"...).

Whether pilot or passenger, there are plenty of options to get airborne. If you hold an FAA PPL, aircraft are available to rent; alternatively, rides are available in a 1926 Curtiss Wright Travelair biplane with Bob 'Captain California' Berwick. Or if you're seeking a calmer way to see the skies, try an early morning ascent from the airfield with Sonoma Ballooning Adventures.

#### DOWNTOWN SONOMA

With the flying finished, the city of Sonoma itself - just a few miles from the airfield – boasts a myriad options to experience the region's famous wine, be it in many of the eateries or dedicated wine-tasting establishments. Most of these are centralised around 'the Plaza', the historical location of the 'Bear Flag Revolt' and the largest town square in the state. The numerous shops include a charming outlet entitled 'Tiddle-E-Winks: Vintage 5 & Dime', where I sampled my first authentic American 'candy' - an entire cherry dipped in chocolate. A vintage theatre, complete with original 1920s seating, completes the idyll of smalltown charm. It was a shame to leave so soon, but a Dodge Charger, the Pacific Coast Highway US-1, San Francisco and the Golden Gate Bridge were beckoning.

Perhaps in the midst of the pandemic, grounded though we are, there's never been a better time to look back fondly on flying adventures with a view to future plans – and Sonoma would certainly be worth a second visit. But in the meantime I'll have to content myself with some more Californian dreaming.



"Running my fingers over exactly one hundred years of history brought a real sense of significance"



Eric also has a set of Whittaker multi-wheeled landing gear for the Clipper.

WORDS Steve Bridgewater IMAGES Various

# **A TRUE WARRIOR**

More than 30,000 fixed gear PA-28s have been built and there must hardly be a pilot who doesn't have the type in his/her logbook. So, after six decades in service, why does this aviation stalwart still appeal to flying schools, hirers and owners? We ask **Kev Arblaster** what makes the Piper Warrior 'just his type'

N FEBRUARY 2021, the world – had it not been in lockdown – would have marked the 60th anniversary of one of the most important and iconic light aircraft ever produced. The first example of the Piper PA-28 Cherokee was delivered in February 1961 and today this safe, stable and sedate four-seater remains among the most numerous GA aircraft in Britain as well as the rest of the world. The earliest Cherokees – many of which

revotow

are still flying today – are easily identified by their constant chord wings, their almost rectangular profile leading to the 'Hershey Bar' nickname (a reference to the similarly shaped American chocolate bar). However, in 1974 that characteristic wing was changed to a tapered profile and the Cherokee Warrior was born.

Actually, that's not strictly true as the first few examples to roll off the production line were referred to as PA-28 Cherokee Challengers. However, this appellation was quickly dropped in favour of Warrior (to stay consistent with the rest of Piper's Native American-inspired nomenclature) and soon the Cherokee part of the name would also be dropped.

G-BSYY – the subject of this issue's 'Just My Type' segment

 is therefore a PA-28 Warrior and, fittingly, it is flown by one of life's warriors.

#### "CAPTAIN KEV"

Kevin Arblaster (Captain Kev to his friends) is approaching 50 and has cerebral palsy, which was caused by a lack of oxygen at birth; a critical two minutes that changed the course of his life. "One moment my life was going in one direction, and in the next it was going in a totally different direction," he explains.

"From the age of three and a half, I went to a special school and at 16 I went to a college for

### "I guess you could call it the Ford Cortina of the skies"

students with a disability." I've been privileged to know Kev for a few years now and he is always very philosophical about the challenges that life has thrown at him. "In those days schools didn't train disabled people for a career; they prepared you for a day centre," he says. "When I was 16, my reading age was nine and mathematics age was eight."

His parents were told 'the state' would look after him and that he 'needn't worry about working.' Yet Kev aspired to more and despite the naysayers, he attended technical college and later university, specialising in software development.

Fast-forward 30 years and along with the rest of us, Kev is suffering from ground-fever and itching to get back in the air. You see, since 2018, he has been a fully qualified private pilot and flies G-BSYY with the East Staffordshire Flying Club at Tatenhill Airfield near Burton-on-Trent in

From wheelchair to cockpit: G-BSYY and her brethren at Aerobility have been providing a new outlook on life for disabled people for the last 25 years. Staffordshire. Typically, being a club member is not enough for Kev, so he also serves as the club's vice chairman.

### AEROBILITY

Kev has been writing software since he was eleven but after leaving university he found it almost impossible to find employment in the IT industry. cerebral palsy can affect people in different ways and in Kev's case it causes problems with his coordination (fastening buttons etc), mobility and speech.

Therefore, when he answered a call in response to a job application, the line would go dead as the interviewer put the phone down upon hearing his voice.

He did eventually find an enlightened employer and spent 15 happy and successful years working in his chosen field. "I left in 2011 and since then I have mostly been lurking on airfields," he says with the infectious smile that he has become famous for. "I've also been involved with the Aerobility charity for the last 14 years, it's a wonderful organisation that enables people with a disability to experience flight. It has also supported my flying career."

Aerobility was founded in 1993 to offer disabled people, without exception, the opportunity to fly an aeroplane. Today it has its headquarters at Blackbushe and maintains a fleet of four aircraft that operate from the Merseyside area, Tatenhill and at Blackbushe itself. Incredibly, nearly 1,000 disabled or terminally ill people take to the skies per year thanks to the charity.

For some, that first flight is enough to change their outlook on disability forever: "If I can fly an aeroplane, what else can I do?". Others, like Kev, realising that the fantasy of flight is truly within their

### "This safe, stable and sedate fourseater remains among the most numerous GA aircraft in Britain"

grasp, decide to continue their training – many all the way to securing a PPL. The charity also provides subsidised flying days for other disability charities and at-cost flight training to disabled people.

Kev is now an ambassador for the charity, promoting both it and all opportunities for disabled pilots, and giving inspirational talks about flying and disability.

"We see people from all kinds of backgrounds and the crucial thing is that it opens up all manner of opportunities, not just in aviation. Aerobility has supported my flying since 2007 and via it I have also made many lifelong friendships from across the aviation fraternity, including GA, commercial and military aviators."

Like so many of us, Kev's passion for aviation began at an early age and his next door neighbour would regularly take him to Elmdon Airport in the 1970s to watch the airliners.

In 1998, Kev saw an advert for the Flying Scholarships for the Disabled charity and was invited for a trial lesson at Enstone. "Whereas most people have their trial lesson in a Cessna 152 or a PA-28 I was fortunate that my first flight was in a TB-20 Trinidad," he recalls. "The instructor was impressed that I could maintain level flight so well and put it down to my use of computer flight simulators."

Kev wasn't selected for a scholarship, but the aviation bug had bitten. "A few months later I started my flying training at Derby Airport and eventually



Perfectly aligned on the centreline, Kev returns to base after a solo sortie in Aerobility's Piper PA-28 Warrior G-BSYY.
 In 2018 Aerobility honoured Kev with the Aviator of the Year Sword, which was presented to him by all nine Red Arrows.
 The Aerobility Warriors are fitted with the Turner hand control system to allow a lower-limb disability pilot to control the rudder mechanism and work towards obtaining a licence. It is certified for use in most PA-28 variants via an STC.

'Captain Kev' lands G-BSYY at Tatenhill at the end of another sortie.

6.

Mary Harrison

24

LOW VOLTS

A THE DEST

00

0

19 0

in the

off I 1 g

LARTER

G-BSYY

10

10

20

20 April 2021 AOPA Aircraft Owner and Pilot

15, 18, 127

""O ....

er Innivie

USB Char

0

E

Sixty years since the first delivery, the PA-28 remains the cornerstone of the world's GA scene.

G-BSYY

### FROM RAG (WINGS) TO RICHES – THE AIRCRAFT THAT KEPT THE PIPER NAME ALIVE

IN THE immediate post-war years, Piper Aircraft found itself in dire financial straits. It had assumed that aviators returning from the war would be happy flying around in the same J-3 Cub variants that had been in service before the conflict. This was far from the truth but with virtually no funds to develop a replacement, the resulting PA-15 Vagabond used much of the same tooling and components as the Cub – including the tail surfaces, landing gear and most of the wing parts. The Vagabond evolved into the PA-20 Pacer and the tricycle-geared PA-22 Tri-Pacer but by the mid 1950s it became obvious that these antiquated fabric-covered ('rag wing') machines needed to be replaced with something more modern.

Cessna had already introduced its metal-fuselaged Model 120 two-seater to the market and the all-metal four-seat Model 170A was selling fast.

Piper recruited Fred Weick to develop a brand-new, all-metal, easy to fly



The prototype PA-28 aloft on an early test flight.

aircraft. Inspired by the success of the PA-24 Comanche, Weick created a lowwinged design, but with fixed tricycle landing gear in place of the Comanche's retractable undercarriage. It was to have a roomy 42in-wide cabin – 7in wider than the Pacer.

The prototype of the new PA-28 (N9135R) first took to the skies on January 10, 1960 and fulfilled the brief: it was simple to build, simple to maintain, and simple to fly. It also incorporated a number of innovative features including an extremely simple construction. By using very few complex curves in the aluminium panels the airframe used less than half the number of parts and rivets as the contemporary Comanche. Using a single access door both reduced costs and improved the integrity of the airframe, while simple manuallyoperated flaps saved weight and cost.

The aircraft also had an all-flying stabilator to save weight, and beaded skins on the tail and control surfaces provided stiffness without internal stiffeners. The tricycle landing gear helped ground handling and used three identically sized wheels to reduce costs and help with soft field performance.

The PA-28 received its FAA type certificate in October 1960 and the first customer received their new aircraft on February 10, 1961.Since then, more than 30,000 have been produced in a multitude of variants and the type remains in production today. It is, without doubt, the aircraft that saved Piper from bankruptcy.

moved to Tatenhill where I have flown ever since."

Throughout his career he had saved money and paid for the occasional flying lesson but in 2018 he decided it was time to get his licence. "I've always been headstrong," he readily admits, "and if I want to do something, I will do it. At college, I was the first disabled person to go onto a mainstream course, and I was told I would never drive yet I passed my test first time. So why not learn to fly?".

"I decided to get my licence early in the year and with the help of Aerobility, I had it in my hand by September. Well, I'd been flying for 20 years with an instructor, I just had to join the dots and put it together!"

Although he has flown numerous types it is the humble Warrior that Kev returns to.

G-BSYY is a Warrior II, built at Piper's Vero Beach factory in Florida in 1986. This variant replaced the original Warrior in 1977 after 1,898 of the former "Aviation is a great leveller - it's a place where we all stand shoulder to shoulder regardless of background, ability or disability"

had been delivered. By now the Cherokee nomenclature had long since been dropped and the new Warrior II had ten more horsepower than its predecessor. This, combined with improved aerodynamics and the use of wheel spats, increased the cruise speed by around 10 kts.

Yankee Yankee is powered by a Lycoming O-320-D3G engine which turns a Sensenich 74DM6-0-60 propeller. She is owned by Aerobility and – although it is not needed by Kev – is fitted with a specially designed Turner hand control system to allow a lower-limb disability pilot to control the rudder mechanism. The development of the system was financed by Aerobility to EASA standards and is certified for use in most PA-28 variants via an STC. Crucially, the system is unique in that it can be left installed on the aircraft; the handle can be removed so as not to interfere with the operation of the aircraft by able-bodied pilots.

Aerobility has a fleet of aircraft at its disposal including the Tecnam P2002JF. This composite machine incorporates modifications for disabled fliers including strengthened, weightbearing wings (making access easier) and additional hand holds. The canopy has also been altered to open extra wide and, of course, it benefits from the innovative hand controls.

Conversely, the PA-28 Warriors (including G-BSSY) don't need any modifications other than the hand controls. The aircraft was designed for flight training and is therefore built to take the rigours of ham-fisted students and belligerent instructors. A disabled aviator can sit, lean or even stand on the aircraft and the low wing means many wheelchair users are able to 'bum shuffle' their way onto the wing and into the pilot's seat. Perhaps its only disadvantage is the single door, which Kev says can make accessing the left-hand seat a little tricky for some pilots.

"For me, it's the cockpit layout that makes the Warrior so perfect for me," he explains. "From the flap lever to the throttle quadrant, the controls just fit my disability. For someone like me with cerebral palsy, the fuel selector can be a struggle, but with practice I've managed to come up with my own way of changing tanks every 30 minutes."

Kev admits that "when they were designing the aircraft in the 1950s I don't think they would have imagined that a pilot with my condition would ever be flying it solo; but unbeknown to them, the designers did a good job in making a user-friendly cockpit".

Even though Kev doesn't need the hand control system, his disability means he finds certain fine movements (such as changing frequencies) fiddly. "Again, it's no fault of the manufacturers," he admits, "and the workaround is to plan properly and practice. In my case I try to pre-set the radio frequencies I need before I fly and you can now connect planning tools like SkyDemon to certain comms equipment."

### **GOING PLACES**

Kev prides himself on being self-sufficient and a lot of that comes down to prior planning. "I like to think of all the 'what ifs', and that starts before I've even driven to the airfield. During the walkaround I give the aircraft a very thorough check and on a couple of occasions I've found a loose

### "ATC tends to reply to my call with 'Go Away Kev, we're shut'... I think it must be my accent!"

fitting. What if it causes a short circuit? OK, it probably won't, but as I'm a software developer and not an electrician, I always get an engineer involved if I see anything I'm unsure about. If the oil is below six quarts I'll top it up and if I'm leaving the circuit, I like to have full tanks (weight permitting)."

Since gaining his licence Kev has grown in confidence and really enjoys taking friends and family flying, often landing away for a slice of cake. "With the power set at 75% and correctly trimmed, she normally cruises at about 103kts burning 9 gal/ hr. She's a very serviceable aircraft and the engineers say parts are readily available. You could call the PA-28 the Ford Cortina of the skies."

"Weather permitting I'll always favour a cross-country to circuit bashing," he says. "I'm a regular visitor to Wolverhampton/Halfpenny Green, Kemble and Turweston. The latter tends to reply to my inbound call with 'Go away Kev, we're shut' ... I think it must be my accent!

"Turweston has long been a supporter of Aerobility and I normally meet up with friends there who have flown up from Blackbushe. Wherever I fly it normally involves food of some kind and to be impartial, I will say all three airfields have good facilities in that regard."

Having led a life where society has pre-judged his abilities and decided what he can and can't do, how does Kev find life in the aviation world? "It is the one place in which I can honestly say I have never felt discriminated", he concludes. "In fact, it has been the exact opposite and Tatenhill Aviation has given me free range of the airfield for the past 20 years. Of course there have been instances where people don't know me and are alarmed.

"But when you think about it, it's quite surreal that I can go flying on my own. It's such a buzz knowing you're the captain, you're legally responsible for the aeroplane and you can go anywhere."

As we mark the sixtieth anniversary of this iconic aircraft it is reassuring that Fred Weick's design is still changing lives.

"Aviation is a great leveller and is one of the few places where we all stand shoulder to shoulder regardless of background, ability or disability," concludes Kev. "I have been in hotel bars with fast jet pilots at 3am more than once; they all like playing 'last man standing'," he says, with a laugh and that trademark smile.



"When you think about it, it's quite surreal that I can go flying on my own. It's such a buzz knowing you're the captain, you're legally responsible for the aeroplane and you can go anywhere."
 The Warrior is a sturdy aeroplane that is ideal for flight training and regular use by a private owner.
 G-BSYY at rest at Blackbushe between flights.

Aerobility has spent the last 25 years removing barriers, making it possible for people to participate in a variety of aviation-related activities regardless of their disability. In 2018 Aerobility created a formation display team made up of people with disabilities – the first of its kind in the UK. Here, G-BSYY flies as part of that Bader's Bus Company team.

### Subvariants

From the basic Cherokee of 1961 the design evolved into a mindboggling range of variants. These are summarised as follows:

VARIANT	SEATS	ENGINE	MAUW	YEAR
PA-28-150 Cherokee	4	150 hp O-320-A2B/E2A	2,150 lb (975 kg).	1961
PA-28-160 Cherokee	4	150 hp O-320-B2B/D2A	2,200 lb (998 kg)	1961
PA-28-180 Cherokee	4	180 hp O-360-A3A/ A4A	2,400 lb (1,089 kg)	1962
PA-28-235 Cherokee Pathfinder	4	235 hp O-540-B2B5/B1B5/B4B5	2,900 lb (1,315 kg)	1963
PA-28S-160 Cherokee (seaplane)	4	160 hp O-320-D2A	2,140 lb (971 kg)	1963
PA-28S-180 Cherokee (seaplane)	4	180 hp O-360-A3A/A4A	2,222 lb (1,008 kg)	1963
PA-28-140 Cherokee Cruiser	2	150 hp O-320-E2A/E3D	1,950 lb (885 kg)	1964
PA-28-140 Cherokee Cruiser	4	150 hp O-320-E2A/E3D	1,950 lb (885 kg)	1965
PA-28R-180 Arrow (RG)	4	180 hp IO-360-B1E	2,500 lb (1,134 kg)	1967
PA-28R-200 Arrow (RG)	4	200 hp IO-360-C1C	2,600 lb (1,179 kg)	1969
PA-28R-200 Arrow II (RG)	4	200 hp IO-360-C1C/ C1C6	2,650 lb (1,202 kg)	1971
PA-28-180 Archer	4	180 hp O-360-A4A/A4M	2,450 lb (1,111 kg)	1972
PA-28-235 Cherokee Pathfinder II	4	235 hp O-540-B4B5	3,000 lb (1,361 kg)	1972
PA-28-151 Cherokee Warrior	4	150 hp O-320-E3D	2,325 lb (1,055 kg)	1974
PA-28-181 Archer II	4	180 hp O-360/A4A	2,550 lb (1,157 kg)	1975
PA-28R-201 Arrow III (RG)	4	200 hp IO-360-C1C6	2,750 lb (1,247 kg)	1976
PA-28R-201T Turbo Arrow III (RG)	4	200 hp TSIO-360-F/360-FB	2,900 lb (1,315 kg)	1976
PA-28-161 Warrior II	4	160 hp O-320-D3G/D2A	2,325 lb (1,055 kg)	1977
PA-28RT-201 Arrow IV (RG)	4	200 hp IO-360-C1C6	2,750 lb (1,247 kg)	1978
PA-28RT-201T Turbo Arrow IV (RG)	4	200 hp TSIO-360-FB	2,900 lb (1,315 kg)	1978
PA-28-201T Turbo Dakota	4	200 hp TSIO-360-FB	2,900 lb (1,315 kg)	1978
PA-28-236 Dakota	4	235 hp O-540-J3A5D	3,000 lb (1,361 kg)	1978
PA-28-161 Warrior II	4	160 hp O-320-D3G/D2A	1,440 lb (1,107 kg)	1982
PA-28-161 Cadet	2	160 hp O-320-D2A/D3G	2,325 lb (1,055 kg)	1988
PA-28-161 Warrior III	4	160 hp O-320-D3G	2,440 lb (1,107 kg)	1994
PA-28-181 Archer III	4	180 hp O-360-A4M	2,550 lb (1,157 kg)	1994
PA-28 Archer DX	4	155 hp CD-155 (diesel)	2,550 lb (1,157 kg)	2014
PA-28 Pilot 100 and Pilot i100	2	180 hp Prime IO-370-D3A	2,550 lb (1,157 kg)	2020

### 48 | TECH AND BOOKS Latest products and books



### AIRCREW CONSPICUITY INTERFACE

### Helping you keep your eyes out of the cockpit ...

What Aircrew Device From Aircrew/Rose Software Systems

THE 'SEE and avoid' principle is the foundation of VFR flying in the UK and all manner of electronic conspicuity (EC) devices are now on the market to help make you and your aircraft as visible as possible. Now, James Rose's British start-up company Aircrew has developed this nifty device to interface with and display the information from EC devices without the need to keep looking down at an iPad.

The device can sync to FLARM, PilotAware, SkyEcho II and Stratux and is currently the only device that can easily connect multiple traffic sources at once – something which is particularly useful for customers who have bought a second EC device using the current rebate system (more of which in the News pages). Although it is primarily a traffic display, the device also has a backup horizon and DI which can be cycled through with a push of the button. There is also a speed tape on the left-hand side of the screen, which uses GPS to show ground speed (it does not currently have pitot-static input), and the right side of the screen displays an altitude tape. The latter uses the GPS or the internal barometer.

Aircrew obtains its GPS and traffic data from an external traffic receiver and in the case of PilotAware, connects via a USB port that provides the device with both power and traffic data over a single cable. Alternatively, it is possible to connect over WiFi and then power the Aircrew using either the 12v DC jack or a USB source. Power consumption is just 2 watts and the unit weighs just 200 grams.

You can connect up to three different traffic sources – for example PilotAware over USB, SkyEcho over WiFi and FLARM over RJ45 – and the device will automatically merge and display traffic from multiple sources.

The company's external Aircrew GPS (£25) is only needed if you are not connecting the Aircrew device to a traffic receiver and still want to display GPS ground speed, GPS altitude and GPS track. Software updates are loaded using a phone app.

Anything that can provide easy-to-view data without the need to be 'heads down' in the cockpit has got to be a good thing.

Where aircrew.co.uk Price £395 + P&P



### HALFPENNY GREEN ARTWORK

What Cards & Posters From HoneyBeaStudios

Elizabeth Keeling, daughter of well-known aviation meteorologist Simon Keeling, is a talented artist whose paintings encompass various subjects.

Selling under the HoneyBeaStudios moniker on Etsy (the go-to website for buying and selling artisan products), included in her portfolio is a series of travel posters of locations close to her heart. One of these is her local airfield and Elizabeth has created a retro-rendition of Wolverhampton Halfpenny Green Airport. Available as either a greetings card or a poster, the artwork is printed on quality 200gsm satin finish paper and depicts the control tower in the style of a vintage travel poster. A similar product features Heathrow Airport.

The poster is available in three sizes (A5, A4 or A3) and AOPA members receive a 10% discount when they enter 'AOPA10' at the online checkout on the Etsy website.

Where etsy.com Price £2.99 (card), £8-£15 (poster) + P&P

### FLYING HIGH IN THE SUNLIT SILENCE AVIATION ART BY JACK BERRY

This charming book by an autistic boy has captured the hearts of the nation and is raising much-needed funds for three worthwhile military charities

Author Jack Berry/Sara Berry From Mention the War Ltd

WE REALISE this book has little relevance to GA, but stick with us...

Fourteen-year-old Jack Berry is severely autistic but, inspired by centenarian Sir Tom Moore's charity work, has set about this delightful project to raise money for military charities. He and his mother Sara have appeared on national TV - including BBC Breakfast - promoting the book and highlighting issues affecting autistic youngsters. In doing so he has gained an enormous following and has already sold more than 4,000 copies of the book.

Jack, who is also selectively non-verbal, began drawing aeroplanes during lockdown and has used art as an emotional outlet during the pandemic. While the drawings have a sense of childhood naivety, Jack's eye for detail and perception of perspective is quite incredible.

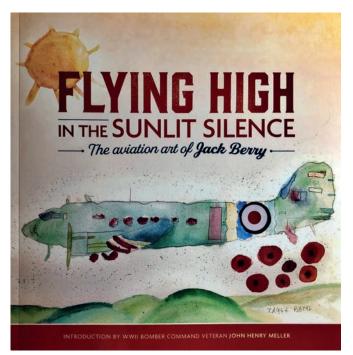
A number of high profile aviation 'names' have come on board with the project to write captions for Jack's artwork. These include members of the Red Arrows and Battle of Britain Memorial Flight, as well as military and test pilots alongside famous authors, including Rowland White. Formula 1 motor racing drivers David Coulthard and Lando Norris, and Red Bull racing car designer Adrian Newey, have also contributed to the book.

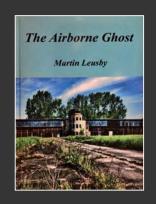
Jack's fascination with aviation was cemented by trips to airshows. "He has always drawn and will do it either to calm himself down or as a way of saying 'thank you' to someone," explains Sara Berry. "The RAF and the services have opened their arms and accepted Jack for who he is. He wants to know everything about their aircraft and wants to show his appreciation to all the pilots."

Flying High in the Sunlit Silence raises valuable funds for the Soldiers, Sailors, Airmen and Families Association's Forces Additional Needs and Disability Forum, the International Bomber Command Centre and Lincolnshire's Lancaster Association.

This really is a charming book, produced by a very talented young man and his obviously (and justifiably) very proud mother. Flying High in the Sunlit Silence wouldn't look amiss on any aviator's bookshelf – but more to the point it would make a perfect gift for the children, grandchildren and future pilots in your life.

Where Amazon Price £11.99





### THE AIRBORNE GHOST

Author Martin Leusby From Self Published

So what did you do in lockdown? AOPA member Martin Leusby spent his time writing a 19,000 word 'novella'.

Martin has owned a Cessna for 34 years and amassed more than 3,000 hours while landing at more than 400 different airfields. He won the AOPA Award for Individual Merit in 1987 and was awarded a very early set of AOPA Platinum Wings.

He has now used this extensive knowledge base to create a crime drama focused on the GA scene in the UK and Europe. The Airborne *Ghost* is entertainingly written in a very enjoyable style; setting the story in the immediate post-Covid era makes it both contemporary and relevant. Some of the characters may be familiar to many readers, which helps add an air of authenticity. I really enjoyed this book; it is easy to read, amusing in places and provided an opportunity to vicariously 'fly' during lockdown.

Where martinleusby@ outlook.com Price £5 (to recoup printing cost) + P&P (£1.50 in UK)

# Coming up in the June edition of AOPA UK Magazine\*

### JUST MY TYPE

Richie Piper has shares in many aeroplanes but among his favourite is his lovely Luscombe 8 Silvaire. Charlotte Bailey asks the Honourable Company of Air Pilots Warden what makes this classic taildragger "just his type".

### GA ROADMAP

The Department for Transport is in the process of issuing what it refers to as its GA Roadmap, containing its vision for General Aviation. The DfT states: "We want the UK to be seen as the best place in the world for aviation and this starts at the grassroots General Aviation." We look at what this plan will mean for recreational flying in the UK.

### ARE YOU PROPERLY INSURED?

Insurance is like a parachute: if you don't have it the first time you need it, there is no second chance. In the first part of a new series we ask a broker why premiums are rising.

### GOOD SAFETY IS NO ACCIDENT

We speak to Harry Harrad and Ben Spiers, founders of the new General Aviation Safety Benchmark Group (GASBG). This is a no-cost group open to GA airfields and is aimed at harmonising the industry's approach to airport safety by enabling open discussion and information sharing about occurrences. Topics include damage to aircraft, wildlife strikes and hazard management, significant FOD events, runway and taxiway incursions and excursions, near misses on the apron, airspace and drone infringements, airproxes, laser strikes and ATC failures.

### A CATALOGUE OF ERRORS

'Good judgment comes from experience; experience comes from bad judgment' – or so goes to the old adage. Using the power of hindsight, an anonymous pilot wants you to learn from their bad judgement in the hope that you don't make the same mistakes.







# **CLASSIFIED ADS**

**AIRCRAFT FOR SALE** 



offer a professional, friendly & individually tailored service to both business & private clients to suit your specific requirements & budget



### TECNAM P2006T LIGHT TWIN TOURER/TRAINER (2016)

TT 288 Hrs. Annual & ARC valid Feb/2022. Garmin G950 EFIS IFR Package w/GDU 1040 PFD & GDU 1040 MFD, KR87 ADF, KN63 DME, GTX33 Mode S, S-TEC 55X Dual Axis A/P, TAS 600 Traffic Avoidance, Wx500 Stormscope. 406Mhz ELT. Hangared since new. Can run on either AvGas or MoGas, or a mix of each.

GBP£395,000 Plus UK VAT where applicable



### **PIPER SARATOGA II TC (2005)**

TTAF&E 998Hrs, Prop 150 Hrs, Annual valid to 22/May/2021, ARC valid to 08/May/2021. Avidyne Entegra EFIS, Dual GTN650 touch screen, KR87 ADF, KN63 DME, GTX330 Mode S, S-TEC 55X A/P, SkyWatch 497 Traffic, Stormscope, GMA 340 Audio/Markers w/6-Place I/com,Kannad AF 4-6Mhz ELT, EMAX engine indication system, Solid State ADAHRS, S/by mechanical flight instruments, S/by mechanical VOR/LOC/ GS ind, CMAX Electronic Approach Charts w/USB update interface. Based in France.

EUR€425,000 EU VAT Paid

CHECK WEB SITE FOR LATEST LISTING - WHICH CAN CHANGE AT SHORT NOTICE - IF YOU ARE A SELLER -DON'T FORGET TO CHECK THE WANTED PAGE ON THE WEB SITE.

DERRICK INGS AIRCRAFT SALES PO Box 1559, Gillingham, Dorset, SP8 4WB, UK. Tel: +44 (0)1747 825378 Mobile: +44 7836 708564 Email: sales@derrickings.com

www.derrickings.com



Cruise at 120 Knts Well equipped with auto pilot and Garmin 430 avionics. Engine over 2000 hours remaining. New Prop this year. Annual until June. Currently based at Halfpenny Green, Wolverhampton.

Contact on 07968 718613 or ive.dering@yahoo.com



Cirrus SR22 - Guernsey £123,000 N852CD G1 S/N 0219 Date MFG 2003 Full Service Records - ASG - Guernsey Annual March 2020 Engine - TSN - 1980.00. Propeller - TSN 889.10 Avidyne Entegra EX5000C DFC90 Digital Auto pilot 2 Garmin 430W, Garmin GTX335, ADS - B "Out" Garmin 340 Cover, headsets, liferaft, jackets, tug

WOODY MILROY 07781-123144



### **1958 JODEL**

1958 Jodel DR100A Serial number 5 Airplane Airframe 1409 hrs Engine C90-14F TSOH 373 hrs Propellor EVRA D11-28-18 1408 hrs Trig Avionics TT21 Becker AR6201 Garman aera 660, Current owner since 1990 Hangered Bourg en Bresse France Rebuilt 2003 AKKI Aviation Turweston COA OSAC France £25,000

> Email harry.leefe@bluewin.ch Mobile +41792743731

### **AIRCRAFT FOR SALE**



G-BBDM – AA5 Traveler **1/4** Share **£3,500** £110 pcm and £80 per tacho hour (wet). Excellent availability - internet booking. Four seater, full IMC fit - Based Thruxton (EGHO). Contact: Tony Harris (0777 5504526 or anthonywharris@hotmail.com)

### **AIRCRAFT FOR SHARE**



Thruxton based, mode S. 8.33 radio £75 per hr, wet. £60 pcm no engine fund Engine time, 780 of 2000, annual usage 170 hrs Airframe time 6666 of 10,000 Well run and friendly group - £1500 or offer.

CONTACT DAVE LEDDY 07973161906

### **LIBERTY XL2**

Friendly Liberty XL2 group based at Biggin Hill looking for buyer for 20% share of IFR equipped aircraft. Great international tourer. The Liberty is FADEC controlled, with a 115 kias cruise at 6 US gallons/hr. Current costs £160/ month and £80/hr. Further details and demo flight available on request. FAA licence required for flights outside the UK. Trial period possible. Ideal candidate will have 200+ hours.



Contact **Bill Roberts** at 020 7564 5461 or at williameroberts2@aol.co.uk.



Equity shares available in a well maintained 2006 Cirrus SR22 GTS with the usual GTS enhancements including Avidyne PFD/MFD, dual GNS430, S-Tec 55X, GTX330, GMA340, Stormscope, Skywatch, EMax, CMax, TAWS-B, TKS and oxygen. Zero-timed engine and prop, healthy fund.

DAN COLLINS phone 0118 907 6468 or dan@vermilionaviation.com



MOONEY 201 HANGARED AT BOOKER WITH GTN 750 Share £2,999 Monthly £130 Hourly £170 Contact details @ www.zitair.aviators.net



Hangared at Goodwood, Full IFR Avionics. Extremely well maintained tourer. Very good availability and online booking in a well run group. Share: £6,000, £200/month and £90/hr wet CONTACT ANDY ON 07798 834758 or andy.leahy@bpglimited.co.uk



Semi aerobatic 2 seat tourer based at Biggin Hill. 160hp engine approx 1150 hrs Prop 205 hrs. Constant speed prop & retractable nose wheel. Good avionics with Mode S & new Trig 8.33 radio. Always hangared. Good availability.

**£110 PM £125 PH WET. OFFERED AT £2500.00** Contact Gary 07785340368 or papaechogroup@gmail.com



This very well-maintained BAe Bulldog is a real pilot's aeroplane. With a one sixth share available/ it comes with all AD's complete, inc. fresh hand-grips & engine bearer inspection. Avionics comprise: GNS430/8.33hz, second radio, separate VOR/ILS, DME & Garmin Transponder. Fly with the friendliest of groups, price £10,800.

For details contact ROGER HAYES 01825 851311 - 07860 257333 - roger@skysport-uk.com



### **BOLKOW BO 209 MONSUN**

SHARES IN THIS SEMI-AEROBATIC TOURER BASED AT ROCHESTER UK. ESTABLISHED AND FRIENDLY GROUP STARTED IN 1975. GOOD AVIONICS, 2 SEATS, 115K CRUISE, 4 HRS ENDURANCE, GOOD AVAILABILITY.

Garmin G5 EFIS 2x 8.33 Comm, 2 Nav, ILS, Mkr, DME, Mode S Tx, PLB, OAT, Htd Pitot, Life raft & Jackets, Cover, G meter etc etc.

Currently £135 per month, £85 per hour. (We also run a voluntary account to pre pay your flying costs) SHARE PRICE £3000 EACH

> FOR MORE INFORMATION Call **David Hall** on 01462 743799 or talk to **Bob Bushnell** in the Rochester Tower (generally on Mondays) or on 07787 852855.



New at Cotswold Airport, this British Classic has an extremely low houred engine; new Trig 8.33 VHF Comm and flight duration of 4.5 hrs. With its excellent handing qualities at £85phr this is an ideal touring or hour building aircraft. Two £3k shares remain. We even have our own dedicated instructor.

CONTACT ROGER HAYES 01285 851333 or 07860 257333 or roger@skysport-uk.com

### LONDON, 2 SEATS, GOOD SYNDICATE, FULLY REFURBISHED GROB 109B GREAT FOR POWER OR MOTORGLIDING PILOTS



G-LREE is a 1984 Grob 109b motorglider based for the last 12 years at Denham. If you want a great view, taildragging, flying near London, and the chance to learn gliding and thermals... and flying 'for free'... this is it! We are a syndicate of 3, over 200+ hours each, with a retiring member and looking to add 1-2 more partners. We check with each other on Wed-Thurs and generally never have problems making time to fly - often with each other. No booking slots required. She has 4252 hrs on airframe, 3073 total on the engine, and 1295 from the last overhaul. We spent over 10k renovating the interior a few years ago, with leather seats and a reorganised instrument panel with a large Garmin 695 GPS, and mode S transponder. Price 11,900 for a quarter, 15,800 for a third. Total running costs are roughly 1,500 per year per quarter share (insurance, airfield, maintenance). Fuel is extra but currently split 3 ways as minimal!

Contact **Tim Morgan** 07970-474-536 or j.t.morgan@btinternet.com



Long established and friendly group looking for a 5th member. Airframe 5900hrs. Engine TSO 2050. IFR equipped. Garmin 430. Garmin GTX330 Transponder ADSB equipped. Digital CHT/Fuel flow monitor. Piper Autocontrol 2 autopilot. On line booking system with good availability.

Share £4000.£170/month £90/hourwet. Minimum 100hrs total. 10hrs complex. Please contact Andrew Levison 07956 282940 and rewflyboy1@aol.com

### **AIRCRAFT FOR SHARE**



Comfortable 4 seat aircraft with long range tanks. Hangared at Fairoaks and carefully maintained. £125/month fixed costs (includes hangarage,insurance,landing card and maintenance)

£115/hr Share price £4000 ono. 80 hours P1 required. Small friendly long established group. Online booking with good availability. Non equity share also available.

Contact Nick Brown 07702 975348 or Arun Sarwal 07971 481012

### **RUTAN LONG EZ**

G-RAEM. Permit to Nov 20. One of the best handling Ezs. 160 hp Lycoming IO-320 B1A. 1600 lbs MTOW. Vortex generators. Roncz canard. Wilhelmson nose-lifter. TTAF 440. Engine/propeller 27 SMOH. Trig 91 dual control kit. £24,000. Based Tatenhill.

> PLEASE CONTACT G SINGLETON 07739 582005 gphly@gmail.com



Navajo 1978 TTAF about 4000 G CBTN based at Biggin Hill EGKB - Share in region of £25000

PLEASE CONTACT CHRIS WOOD 07770398274 durbandentalcentre@btinternet.com



1978 Piper Navajo PA31-310C. ¼ equity share for sale, competitive price. Based North Weald. TTAF 4405. 100 hour check completed March 2019. Co-pilot panel. Extensive avionics including Garmin GNS430, Garmin MX20, King KLN90B second GPS, King RDR2000 weather radar, radio altimeter, Shadin fuel computer, altitude alert Contact **RON** 07771 841613 ron.priorhouse@gmail.com

### **AIRCRAFT ENGINES FOR SALE**

### DE HAVILLAND GIPSY ENGINES

2 x GIPSY QUEEN MK 2 Inclusive of ancillaries. Ex DH 88 Comet replica

2 x GIPSY MAJOR 8 (10) No ancillaries, ex M.o.D. DHC-1 Chipmunk

CONTACT: TEL 020 8 954 5080 E.MAIL: GIPSYMAJOR10@GMAIL.COM



Please contact charlotte @aopa.co.uk

+44(0)1487 830105 +44(0)7583 140127

### TECHNICAL

### Planeweighs Limited

Aircraft weighing & technical services PIPER CUB to BOEING 747 Load/Trim sheet design CAA approval A1/8538/79

Engineers throughout the UK

Tel: 44+ (0) 1792 310566 Fax 310584 Mobile: 07798 662 939

email: info@planeweighs.com www.planeweighs.com

### INSURANCE



Light Aircraft & Jets Helicopters & Gyrocopters Gliders & Microlights Flying Clubs



### INSURANCE



Are you paying too much?

Visicover is a unique service that lets you buy and manage your aeroplane or helicopter insurance online whenever it suits you.

Get an instant quote online Spread your premiums for free
 Select the cover you want 24-Hour claims hotline service

To find out more go to Visicover.com

Authorised and regulated by the Financial Conduct Authority

VISICOVE

### HANGARAGE



Space available in a modern hangar at North Moreton near Wallingford on an 800 metre grass strip with excellent approaches. Avgas available on site.

Please contact PETER VACHER at pvacher@aol.com.

### LIVE THE DREAM!

### **3 BEDROOM HOUSE WITH HANGER**

on

Atlantic Air Park in the Vendee area of France 450,000€

Traditional style 3 bedroom house located just inside the entrance of the Air Park with beautiful views of the runway and surrounding countryside. Plot size 3040m2, area of building including hangar 260m2.

ENQUIRIES TO: TREVOR HOUGHTON Email: newbarn\_flier@hotmail.com Tel: +441474 706470 Mobile: +44 7867803108

### OTHER



### **INSTRUCTORS WANTED**

POM Flight Training at Humberside Airport has been a long established GA flight training and members club for over 16 years.

We are looking for two part time or full time instructors to join our team, to teach PPL/LAPL/IRr & Night ratings for both weekdays and weekends.

Good hourly rates of pay, on-line booking system and flexibility; we operate two of the best PA28-161 Warrior II in the area, and have a healthy and growing number of students. We are a registered CAA DTO based in the Terminal Building, and have two examiners as part of the team.

> Please send your CV to Chris Dale at chris.dale@gbpom.co.uk or call 07985-753336

### MENDELSSOHN THE UK & EUROPE'S AVIONICS SUPPLIER



Lightspeed ZULU.3 Headset Meet Zulu 3, the most comfortable, most durable headset Lightspeed has ever made. Build on the performance and features that have made the legendary Zulu line the choice of private and professional pilots worldwide.



**Bose A20 Headset** 

The Bose® A20 aviation headset is our most advanced pilot headset yet. Its breakthrough innovations reduce more noise and provide even greater comfort than previous models, without compromising the clear audio you expect from Bose. Now includes auxiliary audio input and Bluetooth phone connectivity.



**David Clark DC ONE-X** 

The DC ONE-X headset provides advanced comfort and technology features in a sleek, low-profile design. You'll have the sound performance and durability you need, with the comfort you demand.

	AvMap	
нов	33 4	500
	CIT	
-240		1.0-
-200		B40 2
-160	-0-	040
		0.6-
		-
+0.96		1013

Avmap Ultra EFIS Designed for light-sport, ultra light and experimental aircraft, the AvMap Ultra EFIS contains solid-state gyros, accelerometers, magnetic field sensors, air data sensors and UAV Navigation motion processor. Compact, light and easy to install, providing reliable and

advanced ADAHRS.



Dynon D3 Pocket Panel Portable Touchscreen EFIS with Synthetic Vision Featuring improved brightness, a new intuitive touchscreen interface, new synthetic vision display, and an even lower price point, the D3 is the most advanced portable safety device Dynon has ever made.

180	040 TRK0518 060	£ 2500:
170	10	- 900 ×
160 2 151	2 10	820
140	16	E 00
130	10	- 700 30
cs 154		29.94

Garmin G5 Electronic Flight Instrument for Certificated Aircraft

Boasting a bright, 3.5 inch sunlight readable liquid crystal display (LCD), the G5 is approved as a primary source for aircraft attitude or turn coordination information and secondary source for altitude, airspeed and vertical speed in a single instrument.

Visit our website to see our full and comprehensive supplies of aviation products



GARMIN. Bendix King. On AVIONICS & David Caller f.u.n.k.e. AVMAP TRIG @ Bad Elf