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April/May 2025



INTERVIEW

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A WELSH GEM

Forget about Disneyland, Mona Flying Club could be the happiest place on earth. *P.24*

DAWN TO DUSK

Time to test your airmanship and take part in a test of endurance in the Dawn To Dusk *P.36*



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TO SECURE GA'S FUTURE, WE NEED TO STAND **TOGETHER**

ARTIN ROBINSON goes into great deatail in this issue about the need to have a united front when it comes to regulation changes in the world of aviation, from commercial airlines to drones and unmanned vehciles. Make sure to read his column on page six and think about how you can help.

Following on from Martin's comments about the need to stick together, we've also learnt about other challenges curently facing GA. The 2024 Newman Review into the CAA's governance and financial structure has raised serious concerns about how regulatory costs are distributed across the aviation sector. At the heart of the issue is HM Treasury's

Managing Public Money rules, which prohibit cross-subsidisation. This means the CAA cannot use revenue from commercial aviation to offset regulatory costs for GA, forcing the sector to shoulder a disproportionately high burden.

For GA operators and pilots, the consequences are significant. Fees for licensing, airworthiness approvals, airspace changes, and compliance have risen steeply, creating a financial strain on a sector that operates with tighter margins than airlines.

The disparity also extends to licensing and airworthiness approvals. GA operators must pay high costs for

> pilot certification and aircraft compliance, while large airlines benefit from economies of scale when dealing with regulatory fees.

> As regulatory costs continue to rise, GA stakeholders argue that the current system is inequitable and unsustainable. The government must take a more balanced approach to aviation funding, ensuring that regulatory fees are distributed and proportionate to the

benefits received. Without meaningful reform, the future of GA in the UK could be at serious risk.

As always, if you are able to assist AOPA in any matter, don't hesitate to contact me at editor@aopa.co.uk or Martin Robinson (martin@aopa. co.uk), we look forward to hearing from you.

"The disparity also extends to licensing and airworthiness approvals. GA operators must pay high costs for pilot

certification"



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ADVERTISING & SUBSCRIPTIONS

AOPA UK Lakeside Pavilion, Chaucer Business Park, Watery Lane, Kemsing, TN15 6QY

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

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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 lune/luly 2025 issue should be received no later than 1st May 2025

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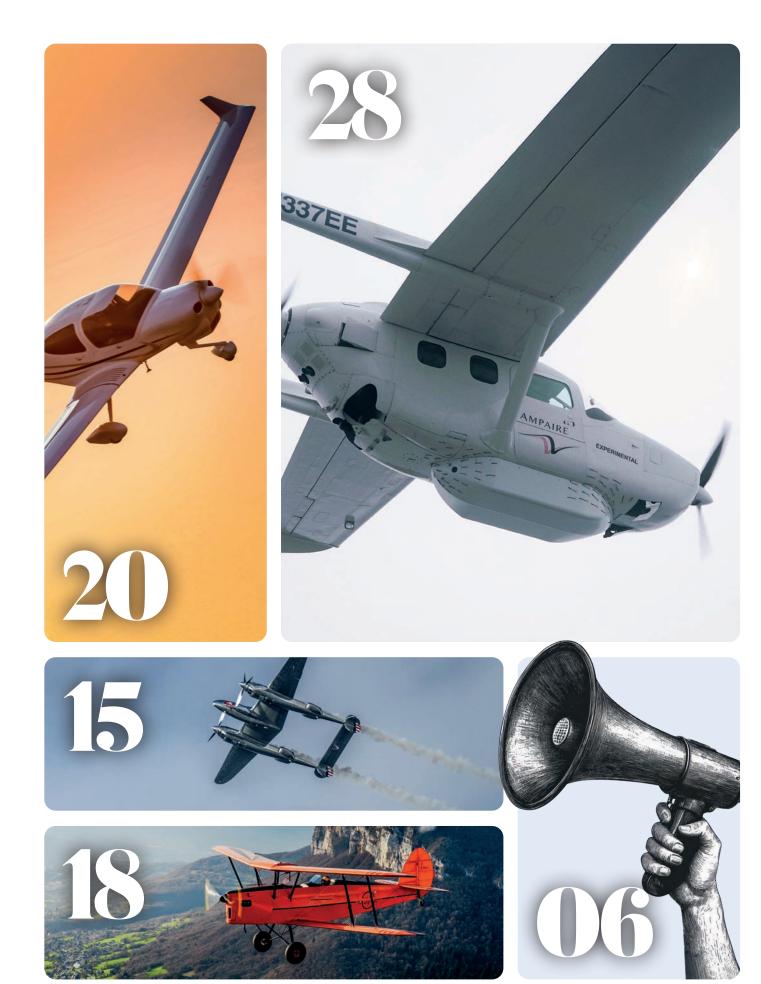
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WORDS Martin Robinson **IMAGES** Adobe

REFORMING CAA CONSULTATIONS: A CALL FOR TRANSPARENCY

The existential threat to General Aviation in the UK – and why pilots must act

ENERAL AVIATION (GA) in the UK is under sustained pressure from a range of threats — some overt, others more insidious. From tightening regulations and restricted airspace to environmental scrutiny and financial pressures, the landscape for private pilots, flying clubs, and small airfields is changing rapidly.

If GA fails to make its voice heard, UK General Aviation risks being reshaped without the proper input or consideration. AOPA UK has long been at the forefront of this battle, working to ensure that policymakers recognise the sector's value. However, the strength of that advocacy depends on the engagement and support of the wider community. Past successes include stopping VFR navigation fees, a 50% reduction of duty on avgas, the IMC rating which improves the safe of GA pilots especially when flying from VMC to IMC to name a few.

This article examines the major challenges facing GA and why, now more than ever, it is vital to stand together to protect our flying freedoms.

One of the most significant threats to GA is the burden of regulation. While safety is paramount, rules designed for commercial airlines are often imposed on GA without consideration for their disproportionate impact on small operators, private pilots, and training organisations.

The UK's aviation consultation process is in urgent need of reform. Too often, stakeholders feel that consultations are little more than box-ticking exercises, with decisions seemingly predetermined rather than shaped by genuine engagement. If we examine the process, the CAA consults towards the end of their own internal discussions. So what's the purpose of consultation, other than

it being a government requirement? This approach is perhaps most evident in the CAA's proposal to introduce a 'user pays' funding model for UKADS1. The proposal lacks transparency on cost calculations and the distribution of financial responsibility, leaving many in the GA sector questioning who benefits.

GA organisations frequently find themselves sidelined in regulatory decisions. The recent airspace change proposals (ACPs) for Oxford and Brize Norton highlighted the problem, with consultation periods so short that meaningful input was almost impossible. At the same time, long-standing concerns over controlled airspace continue to be overlooked.

To rebuild trust, the Government must overhaul the consultation process and mandate a structured, transparent approach including a pre consultation phase with wider stakeholder engagement.

Independent oversight is also essential. Without it, consultations risk becoming bureaucratic exercises that serve only to legitimise pre-determined policies. To ensure fair decision-making, ministers should require impact assessments — particularly for GA — to be embedded in the process. Furthermore, proposals must be presented with clear explanations of cost implications and alternative options, giving all stakeholders a meaningful voice. I have heard it said that there will need to be trade-offs! But we do not know what they look like.

More accessible consultation methods would also drive engagement. Online tools, open forums, and public meetings could broaden participation, ensuring that aviation policy reflects the needs of all sectors. Without these changes, consultations will continue to alienate those they are meant to support.

The CAA is tasked with regulating the sector in the public interest, but engagement with GA is often overlooked. AOPA UK has worked to ensure GA is included in policy discussions, but it remains an uphill battle; the CAA must not let GA wither on the vine whilst at the same time billions of pounds is being invested in future programmes around eVtols and drones whilst ignoring the needs of GA.

Electronic conspicuity (EC) is a prime example. While improving situational awareness is a worthy goal, poorly designed or mandatory EC requirements could impose excessive costs on GA pilots, particularly those flying legacy aircraft or operating in uncontrolled airspace where traffic levels do not justify additional restrictions.

Licensing and medical requirements also present challenges. We have seen AMEs sending pilots for ECG test at huge costs – seemingly this is because the CAA has changed the acceptable risk level – without consultation or discussion! The transition to UK Part-FCL licensing post-Brexit has led to confusion and additional costs, while proposals to revise medical certification threaten to impose unnecessary constraints on private pilots. AOPA UK continues to argue for a proportionate, risk-based approach to regulation that acknowledges the realities of GA flying.

As UK airspace becomes increasingly congested, GA pilots face mounting difficulties in securing access.

Commercial aviation growth, alongside the rise of unmanned aircraft and future urban air mobility (UAM) operations, is further squeezing GA's freedom to operate. So GA has to show how it can be part of the future through integration of existing infrastructure. Autonomous flight presents a bigger challenge which will take many years to evolve and the



"If GA fails to make its voice heard, UK General Aviation risks being reshaped without the proper input or consideration"

transition will present more challenges for GA in the years ahead.

Over the past two decades, controlled airspace has expanded significantly, often with limited justification.

AOPA UK has successfully challenged several airspace change proposals but remains vigilant as commercial operators seek greater protection for their operations. Without active GA participation in these discussions, further restrictions are inevitable. NATS are investing in UTM (Open Air project) with a view to securing a service in the lower airspace in support of drone operations. I have written to NATS asking them to widen their approach that can serve to provide benefits to GA as well.

The rapid growth of drone operations and the potential introduction of UAM present both opportunities and challenges. While innovation in aviation should be welcomed, it must not come at the expense of existing airspace users, no work appears to be going with respect to interoperability issues.

AOPA UK has been heavily involved in discussions on U-Space and drone integration, advocating for a cooperative approach that ensures GA's needs are considered. However, commercial interests wield significant influence, and unless GA pilots and organisations remain engaged, future airspace structures could be designed without them in mind. We need to avoid a situation where in future GA may need to carry duplicate equipment to fly in European and UK airspace in the future.

As the aviation industry faces increasing scrutiny over its environmental impact, GA is not immune to calls for change. While much of the focus is on commercial air transport, small aircraft operators are under growing pressure to adapt.

One of the most immediate concerns for GA is the future of avgas 100LL. With international efforts to eliminate leaded fuels gaining momentum, GA must prepare for a transition to unleaded alternatives. The USA is looking for a fleetwide drop-in replacement to be in place by 2030. The FAA has ordered 100LL to continue to be available until that date. If its not possible to achieve a solution by 2030 the FAA will need to extend the deadline.

The rollout remains slow, and the supporting infrastructure is still in its infancy. AOPA UK is working with regulators and industry stakeholders to

ensure a realistic transition that does not prematurely ground legacy aircraft.

Beyond regulatory and environmental pressures, the economic landscape for GA is becoming increasingly difficult. Rising costs, infrastructure loss, and a lack of investment threaten the sector's long-term viability.

Small airfields are under huge threat of closure often in favour of housing developments or commercial pressures. Once an airfield is gone, it is rarely replaced. Despite their importance, many GA airfields lack statutory protection. We have long held the position that no airfield should be closed without an alternative location being in place – this should be a requirement within the planning system. We have been lobbying for stronger safeguards, recognising airfields as critical infrastructure. However, local authorities and developers frequently undervalue their contribution. Without greater advocacy, more airfields will be lost.

GA needs a strong voice because it is facing multiple threats, but these are not insurmountable. The key to defending flying freedoms lies in unity and representation. AOPA UK provides that essential voice, ensuring that GA pilots are heard. However, an association is only as strong as its membership. The more pilots, flying clubs, and aviation enthusiasts who support AOPA UK, the greater its influence in negotiations with government agencies, the CAA, and industry stakeholders. It means we have more resources hopefully helping us to achieve better outcomes. We also have the members panel which helps with the formulation of positions on key issues.

GA is at a crossroads. Decisions made in the coming years will determine whether it remains a thriving sector or becomes a niche activity. Every pilot has a stake in shaping that future and belonging to an association like AOPA gives you a chance to influence the future. If pilots want to protect their right to fly, they must stand together and fight for the freedoms that make GA so vital to the aviation landscape. The future of GA depends on it.



Martin Robinson
CEO, AOPA UK
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General Aviation news from around the world

AOPA NENS



USINESSES AT Tollerton Airfield have been given three months to leave the site and make way for hundreds of homes – despite more than a thousand objections and numerous petitions. By June 6, all businesses - including the Nottingham City Airport, training schools, a café and air traffic building – will be forced to shut to allow for potential demolition under plans by developer Vistry Homes.

The proposals submitted to Rushcliffe Borough Council are part of a wider plan that quickly proved controversial with residents and those who use the airfield. A petition opposing the development was launched by the Save Nottingham City Airfield group as bosses said they were looking at potential sites for relocation.

Despite various petitions

and more than 1.000 objections to Rushcliffe Borough Council, a threemonth notice has now been given by Vistry Homes to operators Truman Aviation. Brian Wells, the site's owner, confirmed he received the notice via a letter on Tuesday, March 4. He said an agreement had previously been made between both parties when Truman sold the airfield to Vistry in June 2022. This meant the airport and amenities could remain on the site until planning permission was approved.

However, concerns from developers over the potential disruption and issues protesters may create if plans are approved led them to issue the notice. "The developers were determined to have everywhere shut down for when they came to planning," Brian told local press.

"But the board of developers say they've had enough of all these people protesting and want to shut it down now"

"We agreed we'd have two to five years before they would take over. They even suggested they could keep one runway open. But the board of developers say they've had enough of all these people protesting and want to shut it down now." He added the site's closure will result in redundancies and many of the amenities that could have stayed open while development was ongoing - including the café and a single runway for air ambulances - now have no choice but to shut. The history of Tollerton's airfield stretches back to the early 20th century, with several flying clubs being based there in its early days.

During WWII, the aerodrome was acquired by the Air Ministry as a base and was known as RAF Tollerton.

If the current proposal of 400 properties is approved by Rushcliffe Borough Council, developer Vistry Homes is set on a wider plan of 1,600 homes being built on the airfield. Sarah Deacon, chair of the Save Nottingham City Airfield group, says the notice given to Tollerton Airfield is "cruel". She said: "We are shocked Vistry would force the closure of all of the businesses on the airfield and make people redundant when the application hasn't even been considered yet."

PISTON SALES UP IN 2024

THE GENERAL Aviation Manufacturers Association (GAMA) released the 2024 General Aviation Aircraft Shipment and Billing Report during its annual State of the Industry Press Conference. Overall, when compared to 2023, nearly all aircraft segments saw increases in shipments and aircraft deliveries were valued at \$31.2 billion, an increase of 13.3%.

"As we report on the strength of the General Aviation manufacturing industry over the past year, it is notable that for the first time in a decade our companies again exceeded \$30 billion in annual billings and for the second year in a

row, we shipped more than 4,000 units. This strong performance provides

great momentum into 2025, but it is essential that policymakers and regulators on both sides of the Atlantic recognise that for continued

growth, they must work with industry on policy issues such as taxes, trade, regulations and supply chain. GA is at the forefront of advancing technology that makes flying safer and more sustainable, while providing efficient and reliable global economic connectivity, and air

accessibility to rural and small communities that lack commercial airline

> services. It would be a travesty to see any of

to see any of this progress halted due to policy decisions that could have unintended

consequences for an industry that contributes so much." said Pete Bunce, GAMA President and CEO.

Aeroplane shipments in 2024, when compared to 2023, saw piston aircraft increase 4.2% with 1,772 units, turboprops decline by 1.9% with 626 units, and business jets increase 4.7% with 764 units.

Diamond buy Volocopter

The owner of
Diamond Aircraft
has acquired
the assets of
eVTOL pioneer
Volocopter out
of insolvency for
\$11 million. The
estimated value
of the hard assets
and intellectual
property was set
at \$42 million.

Spitfires are back in the air

After the 10-month grounding, the RAF's Merlin-powered Hurricanes, Spitfires and Lancaster will be back at airshows for the 2025 season.

Robinson launches R88

Robinson
Helicopters has
launched its first
new design in
15 years and the
R88 is the biggest
Robinson ever.
The new \$3.3
million aircraft
will carry up to 10
people.

SKYFLY'S AXE VCA COMPLETES FIRST PILOTED FLIGHTS

FOLLOWING SUCCESSFUL hover flights, the Axe has completed its first flights as a fixed-wing aircraft, meeting or exceeding all performance and handling expectations. The flights have included circuits and stall testing, with the Axe operating at heights of over 2,500ft and flying for up to 17 minutes at a time. The company has announced unexpectedly rapid progress through fixed-wing flight testing testing, meaning focus can now shift to airborne transitions between fixedwing flight and hovering.

Skyfly's Axe VCA (Vertically Capable Aircraft) has completed the second of three key milestones in its flight



The Axe has surpassed several milestones recently

testing programme, with the aircraft now having undertaken its first wingborne test flights.

In recent days, the Axe has conducted wingborne flights of up to 17 minutes in duration at heights of up to 2,500ft. The aircraft was found to

be stable and controllable in all flight conditions, with benign stall characteristics.

In the forward flight mode, the Axe VCA can operate like a normal fixed-wing aircraft, cruising at speeds of 100mph.



Certified in less than a year from launch at AERO 2024

ECNAM announced that the European Aviation Safety Agency (EASA) has officially awarded Type Certification to the P2006T NG (Next Generation).

Fifteen years after its initial debut, the P2006T continues to evolve. setting new benchmarks in efficiency, technology, and performance. With hundreds of units in operation and enhancements based on real-world operator feedback, the next generation P2006T is designed to surpass its own legacy.

Compared to the P2006T MkII, the P2006T NG has an increased Maximum Take-Off weight to 1290 kg (2844 lb) that allow more payload. Equipped with fuel-injected Rotax 912iSc3 engines, the P2006T NG is in fact the world's most fuel-efficient twin-engine aircraft. It consumes as little as 14 litres per hour (3.7 USG/h) per engine, reducing CO2 emissions by up to 45 metric tons per year – a breakthrough in environmentally conscious aviation.

Mixed fleet operators will benefit from full interchangeability of engines and accessories between the P-Mentor and the P2006T NG, streamlining logistics and operational efficiency. Maintenance teams will appreciate the quick-release engine cowlings, ensuring easy access for inspections and servicing.

The P2006T NG introduces a totally redesigned cockpit, featuring a central

"Mixed fleet operators will benefit from full interchangeability of engines between the P-Mentor and the P2006T"

console designed to accommodate an FMS GCU477 keyboard, enabling smooth control and entry of all Garmin G1000Nxi avionics. The fully digital, 3-axis GFC700 autopilot with ESP (Electronic Stability and Protection), coupled with the GI-275 standby instrument, enhances flight precision, while the innovative Garmin Flight Stream system ensures total connectivity between tablets, smartphones, and the aircraft.

From flight instructors and students to private

owners, the P2006T NG improves accessibility like never before. Four independent doors – one for the pilot, one for the co-pilot/instructor, one for the passengers and one for the baggage compartment - allow easy boarding and operations.

"With this certification, Tecnam confirms its position as one of the most prolific aircraft manufacturers, as we certify new designs every year in order to offer our customers advanced aircraft," said Giovanni Pascale Langer, Tecnam Managing Director.



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The legendary SV4-RS, a full-scale ULM replica of the iconic Stampe-Vertongen SV-4b, will now fall under the JMB Aircraft banner.

MB AIRCRAFT is proud to announce an exciting new partnership with Ultralight Concept. The legendary SV4-RS, a fullscale ULM replica of the iconic Stampe-Vertongen SV-4b, will now fall under the JMB Aircraft banner. Ultralight Concept has been dedicated to preserving and modernising this classic aircraft. In 2007, the company acquired the original plans of the SV-4b and started an ambitious journey to recreate the aircraft in a 1:1 scale ultralight version. By 2016, the SV4-RS had taken its first flight, combining the timeless elegance of the

past with the materials and technology of today.

To comply with LFT-UL (German Airworthiness Rules for Ultralight Aircraft), Ultralight Concept meticulously reduced the empty weight from the original 560 kg to an impressive 295 kg. This weight optimisation, along with the use of modern materials and equipment. allows the SV4-RS to maintain the exact external dimensions of its historic predecessor while meeting contemporary aviation standards.

Since its first flight, around one hundred SV4-RS aircraft have been sold,

proving its popularity among aviation enthusiasts and neo-retro aircraft lovers. Now, with JMB Aircraft's expertise on high-performance aircraft, this remarkable machine will continue to inspire pilots worldwide.

The Stampe offers pilots the chance to rediscover the golden age of aviation. The SV4-RS's legendary design transports you back to an era of pioneering flight. Its dexterity, stability, and refined craftsmanship ensure an unforgettable flying experience. With its precise, high-end reconstruction, the SV4-RS has become a benchmark

for those who appreciate history and performance in one remarkable aircraft.

JMB Aircraft and Ultralight Concept are excited to bring this timeless legend to even more aviation enthusiasts. Stay tuned for more updates as we embark on this incredible journey together.

Owners of the SV4 will have access to IMB's global network of web training centres, service centres, and customer support. JMB can also provide professional training, technical assistance, and maintenance services to ensure pilots receive the support they need to keep flying.

ALL YOUR NEWS ON THE MOVE

CHANGED YOUR EMAIL or recently set one up? Let us know via the AOPA UK website (Membership, Change of Details), and keep up-to-date on all the latest news and more. Update us now at membership@aopa.co.uk

NUUVA V300 TAKES OFF WITH SUCCESSFUL FIRST FLIGHT

PIPISTREL
ANNOUNCED the
successful first hover
flight of the Nuuva V300,
a long-range, largecapacity hybrid-electric
VTOL (vertical takeoff
and landing) unmanned
aircraft. This milestone
marks an advancement
in the development of
advanced, sustainable and
versatile unmanned aerial
systems (UAS).

The Nuuva V300 is designed to carry a 600-pound payload over a range of up to 300 nautical miles and is capable of operating from paved or unimproved surfaces. The aircraft is

engineered to load cargo through the nose of the fuselage, simplifying the process for operators and allowing for multiple payload configurations. Built to support a capacity of more than 100 cubic feet, it can hold up to three cargo pallets or be loaded with loose cargo, enhancing its utility for a variety of logistics needs.



The Nuuva V300 has completed its first flight

BOOM GOES SUPERSONIC

THE SUCCESSFUL first supersonic flight of Boom's demonstrator aircraft, XB-1, took place on January 28 2025 at the Mojave Air & Space Port in California. Boom designed, built, and flew the world's first independently developed supersonic jet — the first civil supersonic jet made in America.

Flown by Boom Chief Test Pilot Tristan "Geppetto" Brandenburg, XB-1 entered the supersonic corridor and reached an altitude of 35,290 feet before accelerating to Mach 1.122 (652 KTAS or 750 mph), breaking the sound barrier for the first time.

Historically, supersonic aircraft have been the



The XB-1 has officially recorded a speedof Mach 1.122

work of nation states, developed by militaries and governments.

XB-1's supersonic flight marks the first time an independently developed jet has broken the sound barrier.

"XB-1's supersonic flight demonstrates that the technology for passenger supersonic flight has arrived," said Boom founder and CEO Blake Scholl. "A small band of talented and dedicated engineers has accomplished what previously took governments and billions of dollars.

"Next, we are scaling up the technology on XB-1 for the Overture supersonic airliner. Our ultimate goal is to bring the benefits of supersonic flight to everyone."

Special Mission DA62

Diamond Aircraft announced delivery of its first example of the DA62 MPP special missions piston twin to United ATS, which Austriabased Diamond describes as "an aviation services provider in the Middle East."

New Hartzell 916 Prop

Hartzell Propeller announced its new Falcon composite propeller series. The Falcon series kicks off with a lightweight, constant-speed propeller designed specifically for the Rotax 916 engine.

Russia axing new AN-2

Russia will cancel the modest development of a nine-seat utility aircraft, the LMS-901 Baikal, in favour of replacing the radial engine on the AN-2 with a 60-year-old turboprop.

Raimund Riedmann

The wingsuit record breaker and aerial camera man on making history





Raimund Riedmann was only 16 when he took sole control of a glider for the first time. He could never have dreamt that one day he would be flying a DC-6, B-25, Lightning, Mustang and Corsair, for Red Bull's

Flying Bulls. It seems tht fortune favours the brave.



Q: Raimund, you have flown so many different aircraft. How do you switch from one to another so quickly – for example, from a warbird to a DC-6 or a business jet?

A: When I climb into a cockpit, I'm pretty much ready to go. Of course, you need to know certain things like power settings. My advantage is that I gained experience in flying at a very young age, and I continue to build on that foundation. I started out with gliders when I was 16 and later worked as a flight instructor and pilot for Tyrolean Jet Service in Innsbruck. Along the way I also enjoyed aerobatics in various aircraft.

Q: What do you find so exciting about different aeroplanes?

A: They are all interesting to fly in their own way. Warbirds are like sports cars, they catapult you into a third dimension. As for the B-25, it takes a lot of effort to perform an attractive display. In a DC-6, which also flies beautifully by the way, I'm more attracted by the way the crew members work together and how enthusiastic people are when you taxi past. Every aircraft is a challenge to me, and our fleet is incredibly diverse.

Q: How did you get into flying?

A: I was always fascinated by flying, but first I made a detour into studying architecture while taking my airline pilot's licence and training as a flying instructor. My degree course was great, but when I was offered a job as a flight instructor and operations manager by a flying school, I had to let it go. Flying is my vocation though, so I have never regretted it.

Q: What do you think makes a good pilot?

A: I think it's all about flexibility and the capacity to adapt quickly. Of course, you also need to develop a sense for the three-dimensional nature of airspace, especially when performing aerobatics. For us, the ability to fly an aeroplane by hand with precision is still very important as well.

Q: How did your first encounter with Sigi Angerer, the former Flight Officer of the Flying Bulls, come about??

A: That was long before the Flying Bulls came into existence. Sigi was working as a Flight Officer for Tyrolean Jet Service in Innsbruck. I applied to them but didn't hear anything for weeks. Eventually he called me and asked whether I would transfer a Citation from Innsbruck to Salzburg with him.

When we got there, a nice man was waiting. Many years later, I found out this was Dietrich Mateschitz [the late founder of the Red Bull company]. That was my debut for Tyrolean Jet Service, where I would spend some memorable years flying an air ambulance, especially the Falcon 10. It was highly unconventional, with small airfields and some wild approaches, but it gave me a good schooling.

Q: While you were flying in Tyrol, the idea of the Flying Bulls was taking shape. How did you first come into contact with them?

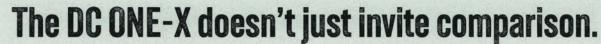
A: Sigi told me one day that Red Bull had acquired a B-25 and was bringing it to Innsbruck. I couldn't believe it, I was overjoved. At the time, he already had a Corsair plus the T-28. I then started helping out with the B-25 and coming along on flight days. This didn't go unnoticed by Sigi, and at some stage he asked me if I would like to be his co-pilot. My first flight was in 1999, and after that things moved fast. When they acquired the DC-6 in 2000, I moved to the Flying Bulls on a part-time basis. I went full-time in 2002, starting with the T-28, B-25 and a Citation. More and more aircraft were added, then eventually I succeeded Sigi as Flight Officer and chief pilot.

Q: For you, what is so exceptional about the concept of the Flying Bulls?

A: The outstanding cooperation between the technicians and us pilots. Our technicians are unique in Europe, perhaps even the world. They really do an outstanding job. Of course, our approach is unique too. We put our aircraft under more strain than others, I think.

Every year, we perform aerobatics and close formation flying at around 50 events. We are well aware of the workload, so the engineering has to be up to the task.









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Crisp, clear communication? Roger that.

Advanced M-5B electret, noise-cancelling microphone ensures clear communication and voice transmission with ATC. Sporty's Pilot Shop calls this mic "Second to None" for clarity.



The DC ONE-X is designed with features not found on other premium ANR headsets. Its lightweight (just 12.3 ounces), yet rugged alloy suspension system provides a unique combination of comfort and durability. Excellent Hybrid ANR performance ensures quiet, fatigue-free flights. And its price (under \$1,000), makes the DC ONE-X the best value, premium ANR headset in aviation.

For more information and to find your nearest dealer, visit **www.davidclark.com**.





COMMUNITY

Welcome to the COMMUNITY section of the magazine. Bringing you help, advice, and other insights from the world of AOPA, in an honest and up front way to help you stay flying. Something to say? Please contact us at **editor@aopa.co.uk**

WORDS & IMAGES Jonathan Willis

RACE SCHOOL IS ALL SET TO KICK OFF THE BRITISH AIR RACING CHAMPIONSHIP FOR THE 2025 SEASON

Ready for a new flying challenge? Discover what it takes to compete in the sport of Air Racing

RACE SCHOOL is back! Now that winter is behind us, it's the perfect time to make the most of your PPL and explore new ways of flying.

Race School is taking place at Popham on the 26th and 27th April 2025, the aim of which is to bring in new pilots and navigators who wish to compete in the British Air Racing series of Handicap air races run by The Royal Aeroclub Records, Rallying and Racing Association.

Pilots can attend either day of the race school – as both follow the same itinerary – to learn the rules, regulations, and techniques of air racing. If the participant brings their own aircraft, they will have an opportunity to fly with an experienced race check pilot who will demonstrate race techniques and guidance around a practice race course.

The one-day event is free to attend. For a pilot to race, they must have at least 100 hours P1 and an aircraft capable of at least 100mph straight and level.

Please note that owing to advances in handicapping software, racing at 100% power is no longer mandatory and a reduced power setting can now be used.

The Race School on the 26th and 27th April 2025 precedes a fantastic line-up of race dates and venues for the upcoming season, as follows:

- 24th/25th May Sherburn in Elmet
- 21st/22nd June Leicester
- 26th/27th July Fishburn
- 23rd/24th August Enniskillen
- 27th/28th September Wellesbourne

To register for Race School go to: www.royalaeroclubrrra. co.uk/event-list.

To find out more about air racing go to: www. royalaeroclubrrra.co.uk/become-a-racer.

To whet your appetite for air racing, the Flying Reporter, Jon hunt, has an excellent film about Air Racing titled "Full Throttle at 600ft" on YouTube, which is well worth a watch!



If you want to learn how to compete in air racing, then this is the best opportunity WORDS John Walker IMAGES Various

THE LATEST NEWS ON THE UK'S AIRFIEI DS

John Walker keeps a close eye on airfields across the UK that are under threat of closure or destruction. Here's the latest news from some of those at risk

Visit

THERE ARE airfields across the UK currently under threat. Here are the latest developments, updated 15 March 2025.

CAMBRDIGE

Marshall Aerospace and Defence Group will be vacating the aerodrome by 2027 and an outline planning application for Marshall's new facility at Cranfield was conditionally granted by Central Bedfordshire Council on 19 April 2023. The conditions were signed off in a Section 106 agreement dated 20

October 2023. The Cambridge site is cited for a major housing development in the first proposals for the new Greater Cambridge Local Plan issued.

CHALGROVE

On the 9th December 2024. the South Oxfordshire and Vale of the White Horse District Councils draft Joint Local Plan for the years up to 2041 was submitted for public examination.

The Joint Plan will supersede both of the Council's

current Local Plans and the draft excludes the aerodrome site from development. Homes England (HE), the site landowner, have objected to this exclusion and consulted with the local community from 18 April to 17 May 2024 on their revised scheme for a housing development on the site.

DONCASTER SHEFFIELD

On the 21st March 2024

Doncaster City Council signed a 125-year lease of the site from the Peel Group, the land

> owner, and have selected Munich Airport International as the potential aerodrome operator

with the intent to restart passenger flights in the Spring of 2026. However, a final decision on using £105m of devolution funding to reopen the aerodrome is to be delayed until the Summer as an independent assessment is ordered into the "significant risks" of the plan.

FAIROAKS

On the 10th December 2024, Surrey Heath Borough Council's draft 2038 Local Plan was submitted for public examination. The draft states that part of the aerodrome site is earmarked as a strategically important employment site and acknowledges its economic value as a General Aviation aerodrome.

"However. a final decision on *using £105m* of devolution funding to reopen the aerodrome is to be delayed until the Summer"

ELVINGTON

On the 27th February 2025 York City Council adopted a new draft Local Plan for the years up to 2032/33 which includes a development of up to 3,330 homes occupying the middle section of the runway.

GLOUCESTERSHIRE

Cheltenham Borough Council and Gloucester City Council, the site owners, have appointed Savills as their agent for the sale of the aerodrome freehold including the Meteor Business Park at a guide price of £25 million. The sale is on condition that the site remains an aerodrome.

THURROCK

Thurrock Council Planning Committee refused on 9th July 2024 a planning application for development of 750 houses, a medical centre and employment units on the aerodrome site. The applicant has appealed this decision and a Public Inquiry is due to be held in July 2025. ■



Doncaster Sheffield Airport has signed a 125-year lease and is hoping to restart passenger flights in 2026







Fax +49-(0) 89-544 599-70 www.tost.de

YOUR HERO THE SLEEK DIAMOND DA40 IS OUR LATEST TOP PICK

DIAMOND'S DA40 Diamond Star is one of the more desirable used piston singles around. It works as a trainer, moves right along for travelling, and for those who might eventually step up to a Diamond twin, the DA40's systems are a good primer.

The four-seat
DA40 was based on
Diamond's two-seat
DA20. It first flew in
1997 but production
began in 2000 and it
is still being produced
today, with more than
2,200 units already
in the air – and it's
popularity doesn't seem
to be waining.

A big draw is the aeroplane's sleek composite design and styling. If you like the looks of a Cirrus or Columbia, the DA40

will grab your eye. You'll see a strong main structure mated with a long efficient wing born in the soaring world.

Like Cirrus models, you'll pay a hefty premium for even the earliest DA40s.

There have been reports of damage-free and well-maintained models selling for over double the suggested Aircraft Bluebook list price. We're told it's worth the cost though, as owner satisfaction and reliability are high, and that alone is hard to put a price on. The DA40 has few bad habits — if any. It boasts

The DA40 has few bad habits — if any. It boasts crisp and predictable handling, a comfortable ride, plus the bonus of a familiar and reliable 180-HP Lycoming powerplant ■

Send Your Hero to **editor@aopa.co.uk.** It doesn't have to be your own aircraft... own it or admire it from afar, either way we want to know what's Your Hero and why. Just send us around 100 words, your top 6 'fast facts' and we'll do the rest to show off your favourite aircraft.





Find

WORDS Malcolm Bird **IMAGES** Various - and for illustration purposes only

MWG CAN HELP YOU

The AOPA Maintenance Working Group has handled many queries over the last couple of years from members regarding their aircraft

WHEN THINGS go awry with your aircraft, it can be tough trying to find a solution all by yourself. But the AOPA Maintenance Working Group has been helping members with their aircraft issues for a number of years. Here are some more reports showing how the MWG has helped.

USA to UK 1990. Private ops since. Owner seeking advice on estimation of 'factored service hours' as regd. by AD. EASA has decided not to adopt the AD but plans to issue a Proposed AD to address the safety risk. Provided guidance on who to talk with.

PA-30B TWIN **COMANCHE**

Owner's aircraft on **facebook** severely damaged by another aircraft striking it following a runway departure on landing. Info sought on where to source replacement salvaged parts, also recommendations for repair organisations. Info provided to add to that which owner had sought from many sources, with ultimate success. Restoration back to full airworthiness now started.

PA-28-161

Engine split following a recent oil leak revealed crankshaft SB, as recorded in logbook five years ago by overhauler, had not in fact been done. Overhauler not discussing situation helpfully or sensibly. Suggested submit MOR. Owner leaving in hands of CAMO.

PA-28-181

Re wing spar AD (FAA AD 2020-26-16). A/c new 1978, apparently used for flight training, then imported from



Owner sought requirements for going onto G-reg. Was unable to find clear instructions. With much help from

CAA team on member guided to correct resources.

CONTINENTAL 10-360

Brand new engine ordered was delivered 11 months later but was wrong configuration and did not have all service bulletins applied. After 7 months out of the air and 18 months since starting the process, aircraft finally returned to service. Advised that this unfortunate incident was not entirely unusual and that dealer should have ensured all was really ready before calling in aircraft. As the purchase was as a private individual from a UK-based agent, the provisions of the Consumer Rights Act 2015 apply, in particular Provision 9. Member encouraged to registering displeasure with Continental and ask for clarification of warranty start date etc.



The MWG helped solves issues for a Bo 209 going onto G-Reg



The Continental IO-360 came in the wrong configuration

YAK 52

M14P engine fully overhauled in Lithuania and re-installed on the aircraft. Delays in getting parts meant the annual expired three weeks before the work was completed. On 27th April, an application went in to the CAA for temporary permit for a check flight and then positioning flight for the annual to be completed. The fee of £240 was taken on the day of application. By the 26th June there was no response despite the CAA

website stating such permit issues should be turned around in five days. Telephone enquiries and email enquiries only received response 'it is with the technical team'. AOPA contacted CAA to see what could be done on 28th June advised: "application is being processed. If all the information is there, it will be issued within the next couple of days." CAA contacted member the next day and the permit arrived in the following evening.

Are you due for an Instructor Refresher Seminar?



DON'T LOSE YOUR INSTRUCTOR CERTIFICATE

You may attend a refresher seminar at any time during the validity of your FI or CRI certificate. The AOPA Instructor Seminar is also open to aspiring flight instructors

2025 DATES FOR AOPA INSTRUCTOR SEMINARS

7/8 May, 12/13 August and 11/12 November
To be held at the AOPA HQ in Sevenoaks
The cost for two full days seminar for non-members is £325
AOPA members benefit from a £50 DISCOUNT

TOPICS COVERED INCLUDE

- New/current rules/regulations, with emphasis on knowledge of UK-part FCL •
- Teaching and learning
 Instructional techniques
 The role of the instructor
 - · National regulations · Flight safety, incident and accident prevention ·
 - Teaching instrument flying Legal aspects and enforcement procedures
 - · Navigational skills, new/current radio navigation aids · Airmanship ·
 - Weather related topics, methods of distribution Human factors
 - Additional topics selected by the competent authority



For further details contact the AOPA office on **020 7834 5631** or email **mandy@aopa.co.uk**. You can also register for the seminar online at **www.aopa.co.uk**

WORDS David Rawlings IMAGES Various

Y CROESO CYNHESAF YNG NGHYMRU*

David Rawlings headed to Mona Flying Club on Anglesey in North Wales and received the *warmest welcome in Wales

WHEN I was told about a GA flying club set on an Air Force base, I knew I had to go and check it out - especially as it is celebrating its 50th anniversary.

Mona Flying Club is the association, and they are based (unsurprisingly) at RAF Mona on the Isle of Anglesey in North Wales.

The airfield is used as a relief runway for the Hawks and Texans flying out of nearby RAF Valley, but in the evenings and weekends when Valley isn't flying, the runway and the facilities rented from the RAF, are at the flying club's disposal. When I arrived at the clubhouse for one of their regular tea and cake mornings, I received a warm welcome from several members, including Vic Hughes, a founding member of Mona Flying Club in 1975.

He mentioned that the first clubhouse was an old Nissen hut, which was next to their T-2 hangar. The Nissen hut has long gone, "We're now in the old ATC building but have changed it for our purposes," Vic explained.

However, the T-2 (with the 'T' standing for Temporary) is not only still standing but is in fantastic condition. "It's original in the same way Triggers' broom is original," commented club secretary Mark Salisbury.

The hangar still has the original steel works, but has been fully refurbished in recent years including a new skin and floor.

WWI BEGINNINGS

RAF Mona has over 100 years of history. Royal Naval Air Station (RNAS) Anglesey opened on the site on 26th September 1915 as a base for SS Class airships. Also known as RNAS Bodffordd, RNAS Gwalchmai and RNAS Llangefni, the field provided a base for airships providing cover to shipping in the Irish Sea and Morecambe Bay. In 1920, the site was bought by Anglesey Council.

In 1941, the site was requisitioned for an airfield

and what was a cholera hospital was then transferred to Llangefni. From 1942 -1943, hangars and concrete runways were laid down. The base was temporarily renamed RAF Heneglwys, although it was soon renamed RAF Mona.

During WWII the airfield was host to Blackburn Botha torpedo Bombers, Fairey Battles, Miles Martinets and Avro Ansons. By the end of the war 1,786 personnel were based at Mona.

At the end of the war, Mona

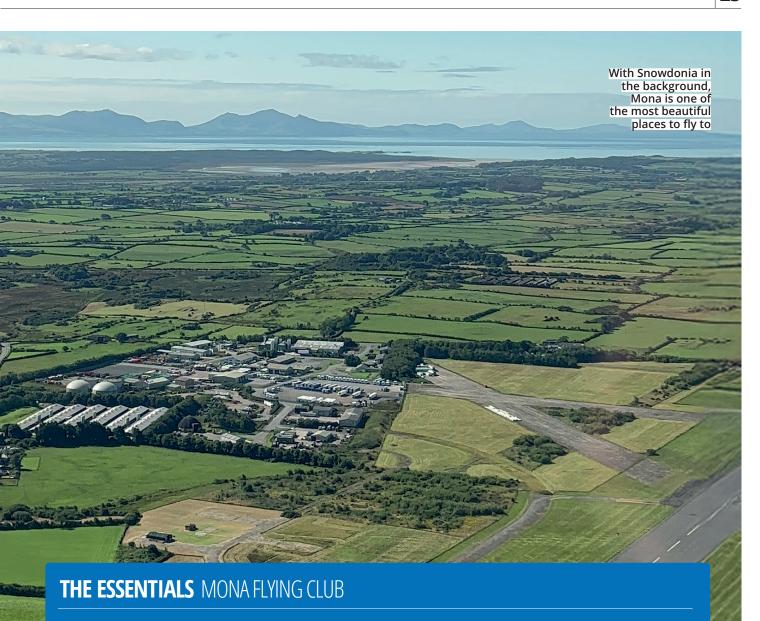


The clubhouse with the 'temporary' hangar behind



As the sign says - welcome! - expect a warm greeting





DETAILS

A: Mona Flying Club LL65 4RW, Holyhead, Sir Ynys Môn, Wales, United Kingdom T: 01407 720581 (voicemail on weekdays) E: admin@flymona.com W: www.flymona.co.uk

VISITING PILOTS INFO

Mona is open most weekends and welcomes all visitors. Airfield details can be found in the AIP and updated Pooleys plates.

PPR is required and you must provide the club with a copy of your aircraft insurance certificate which must include £7.5m Crown indemnity cover. You can request PPR via email during the week and can provide an electronic copy of your insurance certificate via these means. You must also call the club on the day of your intended arrival, or you can just call and request PPR on the day and bring your insurance certificate with you.

FEES

Your landing fee includes as many circuits as you wish on the clubs' large and well-kept runway. Overnight stays are possible, and it may be possible to hangar your aircraft, subject to availability, with sufficient notice. Mid-week arrival is sometimes possible subject to circumstances.

Overnight stays require a temporary membership in addition to a landing fee.

VISITS

For visits during weekday working hours, you will need to contact the RAF via https://www.raf.mod.uk/our-organisation/stations/raf-valley/flying-info/ and email the club at admin@ flymona.com. For PPR at the weekend, please complete the form which can be found on the website.

EXTRAS ASIDE FROM FLYING

Mona doesn't have fuel, but nearby Caernarfon does. However, the club offers an exceptionally warm welcome as free Wi-Fi, free use of Microsoft-based computers and printers for flight planning purposes, free tea and coffee, use of fridge, microwave, oven and hob should you wish to cook a meal, comfortable seating in our cosy clubhouse, outside seating, subject to weather. The club is also willing to help with onward travel if you're planning on staying a while.

was placed into care and maintenance until opening again in 1951 as a relief landing ground for RAF Valley, which operated De Havilland Vampire jet fighters with Number 202 Advanced Flying School.

RELATIONSHIP WITH THE RAF

You might be thinking how does this work when it is an active RAF base and Mona is a flying club? From Monday to Friday until late afternoon/ early evening, the RAF has exclusive use of the runway. It serves as a relief runway in case of emergencies at RAF Valley, and is also used for pilots to practice circuits and touch-and-go landings in the Texans and Hawks.

Mona's Chairman Geraint Jones explains the unique set up: "We think we're the only such civilian club stationed on a RAF base. In the summer we can be in the hangar or in

the clubhouse and as soon as the RAF are done for the day, the runway is ours and we go flying," he said. "We have a really good relationship with the RAF, where they're happy we're here keeping an eve on the place for them and similarly the club is privileged to have use of some great facilities."

During my visit Linda Owen had brought in homemade treats, which included a victoria sponge, lemon drizzle cake and biscuits. Plenty of club members showed up, with no intention of flying, but just to catch up with their club member friends talking. There was plenty of chat about the past, including Vic's story about the club's opening. "Derek Jones was the main force behind the club," Vic recounted. "He was a local policeman and was in discussions for a long time with the RAF. He'd always

"We think we're the only such civilian club stationed on a RAF base"



turn up smartly dressed with his briefcase, he sorted everything and was the first secretary of the club, but the funny thing was, he never flew himself."

Vic then reminisced about the first aircraft to ever come into the club. "It flew in from Liverpool and all the founding members lined up along the runway to welcome the aircraft in."

A CLUB, MORE THAN A SCHOOL

I cannot emphasise enough how much of a family feel there is at the club. You really are welcomed like an old friend when you come into the clubhouse. Kyle Iones made the tea and is currently working at the club to earn flying hours to gain his PPL. Even on a cold March morning he was busy cleaning aircraft as well. There are several instructors, and the club has around eight or nine



Always plenty of aircraft on show at Mona



A briefing before members were able to go flying



The members were captivated by a visiting Marchetti SF260

students, and it is in a perfect location for flying. "We're surrounded by unrestricted airspace, so it gives students the chance to learn airmanship and other aspects of aviation without being overwhelmed. And when they get more confident, they're able to fly towards Liverpool and Manchester to learn further radio and Air Traffic Control skills," explained Geraint.

The club aims to keep prices as low as possible for student pilots so they can keep their hobby without bankrupting themselves. "We are a club more than a school," added Geraint.

There was also a lot of excitement on the day — and not just because of the cakes — one of the club's instructors, Karl, was flying in in a stunning Siai Marchetti SF260, and there was a promise of flights. This is when Mona Flying Club comes into its own, because not only is it unrestricted airspace but its surrounded by picturesque mountains, the coast and miles and miles of relatively empty skies.

Three people took the opportunity to go for a flight with Karl, including Kyle and Gwilym Jones — another student pilot working towards his PPL. Neither of them could believe their luck to fly in an Italian Military trainer.

HEAD TO MONA

I can't stress enough how enjovable an afternoon at Mona is. You are made to feel like the longest serving member, the tea and cakes are fabulous, and everyone is more than willing to chat and exchange flying stories. "People often fly over us because we don't have fuel on site, but we would say, come and see us, you'll be more than welcome," said Geraint. And I can completely agree. Go visit Mona, you won't regret it.





Ampaire's Electric EEL is on course to be a record breaker

WORDS Alicia Herron, courtesy of AOPA US IMAGES Ampaire

The flying electric EEL Ampaire leads into the world of tomorrow

Electric aircraft might conjure thoughts of huge investments, impracticality, broken promises, and a distant future. But California-based Ampaire is different, or at least, seems to be. Their goal? Bring a hybrid electric future to the market as soon as practical with available technology

HE EASIEST way to describe this latest venture, Ampaire is making the Prius of the sky by starting with the engine.

Ampaire calls its hybrid electric drivetrains *AmpDrives*. "It can be used in an integrated parallel hybrid... almost like a generator," says CEO Kevin Noertker. "And then specific in the Caravan," he notes, which is their first target

market. "We have our AMP H570. H for hybrid, 570 for 570 kilowatts. It's pretty straightforward. "Now, this is a direct drop-in replacement for your turbine engines that are traditionally in Caravans and Twin Otters and other aeroplanes of this type," he explains. In the parallel hybrid system, the compressionignition engine creates 550 HP, and the integrated electric powertrain adds another 200

to 250 HP. The AMP 570 will be Ampaire's launch product, and Noertker believes that, as of this writing, they are about 18 months away from earning a supplemental type certificate. Noertker notes that the company is also working with maintenance, repair, and overhaul bases in a partnership model to make sure the maintenance side is also as streamlined as possible.

Noertker says, "It will be less expensive to operate specifically because we have over 50 percent fuel savings on the engines, and we expect that the maintenance costs will be lower as well," even with the added complexity of a parallel electric system.

The company started in 2016 in Temecula, California. "That was where we could find a free garage from my co-founder's parents," says Noertker. "It's where we built our first prototypes." Before founding Ampaire, Noertker earned a degree in mechanical engineering at CalTech and conducted robotics research at NASA's let Propulsion Laboratory, before joining Northrop Grumman for stealth technology research and development. He credits his time at Northrop for teaching him how to develop "very advanced technologies" but in a way that viewed the "life cycle of a system," which thus informed his strategies at

Ampaire.

The hybrid approach means Ampaire can blaze a trail with available technology, rather than waiting for battery technology to catch up to dreams and desires, as some other companies that are still seemingly committed to being fully electric are doing. "You think about charging infrastructure, range anxiety, the economics of operations. These are the things that we're able to overcome, battery energy density as an example, by bringing these hybrid propulsion systems to market. So, where we focus our dayto-day is about maturing those systems," says Noertker.

Noertker has been careful to keep the company lean - Ampaire has a worldwide staff of 20 (most in the United States, one in the United Kingdom, and one in China) and not to grow too quickly, and not to over-promise (weren't we supposed to have flying Ubers by now...?).

FAST FACTS

HOUR-LONG ENDURANCE

1375

MILES COVERED

GALLONS PER HOUR

Ampaire has hit major milestones, starting with the first flight in June 2019, test runs in Hawaii, Scotland, and Alaska, and then a recordbreaking endurance flight of 12 hours with two hours reserve in 2023, and more than 30,000 collective miles flown.

IN THE AIR

After moving to downtown Los Angeles, then a five-year stint at the Hawthorne airport (HHR) "in the shadow of SpaceX," Ampaire found a new home at Long Beach Daugherty Field (LGB) in Long Beach, California in April 2024. Long Beach is where the bulk of the day-today takes place, and for now, flight operations for Ampaire's experimental aircraft take place out of Camarillo (CMA), considerably less densely populated than Los Angeles, and which the FAA prefers for flight testing.

Although the launch market looks like "Cessna Grand Caravans, Twin Otters, Sky





- 1. Ampaire's fleet that is fleet that is continuing to expand
- 2. Test pilot Elliot Seguin with the electric aircraft
- 3. The flight path of the EEL's 12-hour flight



The Electric EEL flying over Hawaii



Couriers, Quest Kodiaks," the original testbed aircraft are a pair of Cessna Skymasters, which Ampaire keeps along with its testbed Caravan at CMA. Ampaire's contract test pilots - Justin Gillen and Elliot Seguin of Wasabi Aero - are both Mojave-based engineers with experience at Scaled Composites; Gillen and Seguin have been with Ampaire since nearly the

beginning. They are also both the kind of people you just want to keep talking in a hope that you'll learn something new.

USING WHAT'S THERE

At Ampaire's Camarillo wing, Gillen introduces their Skymaster, noting that it was most practical to add a modified powerplant to an existing airframe, resulting in

"But as for the Skymaster, they've modified it. They call this one, N337EE, the Electric EEL"

a functional hybrid aircraft, although not necessarily the sleekest. Gillen says he is looking forward to a future where electric airplanes can be "designed and built from the ground up."

But as for the Skymaster, they've modified it. They call this one, N337EE, the Electric EEL. "The original Skymaster came with two Continental IO-360s. This Skymaster had



the original 360 in the back removed to be replaced with this STC bigger IO-550," says Gillen. "Then we took the front engine off the 360 that was still there from an original installation and installed the Ampaire electric power system. The electric power system is basically equivalent to the engine that we took off in terms of power rating. Then, of course,

with the bigger engine on the back, we get the added performance."

"Where do aeroplanes use the most power?
Obviously, it's in takeoff and climb phases," Gillen says.
"Ampaire's goal has been to identify the extra power needed for takeoff and climb – power that isn't really necessary in cruise – so it can be replaced with electric

"Then, of course, with the bigger engine on the back, we get the added performance"

power," he explains. "So, it's like a power augmentation system, if you will."

Seguin will be flying today, and he notes the only tricky thing is the adjustments made to both powerplants, and to make sure you're adjusting the correct one – electric in front, IO-550 in the back – throughout the flight. Seguin notes that the battery in a belly pod on the



Skymaster is the big safety hazard and describes the smoke hoods to use in case of emergency, but otherwise, the safety briefing is standard. Electrical fire and thermal runaway are the worst-case scenarios, and he recounts having to call ahead to fire stations on various missions to tell them if they land offairport and see an aeroplane on fire, to absolutely not try to put it out with water. "You've seen videos of Teslas on fire, right?"

Engine start begins with the electric engine emitting a wholly undramatic whir and hum we're used to hearing near electric cars, not aircraft. Electric is started first because otherwise you wouldn't be able to hear it start at all. Ampaire's approach aims to reduce fuel consumption and costs by supplementing combustion power with electric propulsion.

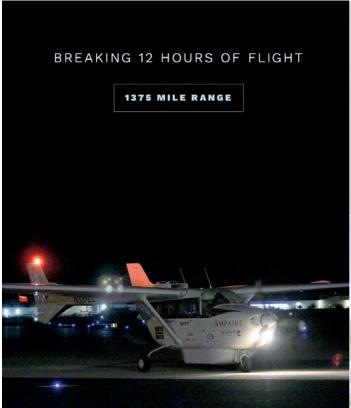
In takeoff, this is where the most savings can be made and will be especially effective for short hop essential air servicetype flights around the world (think delivering mail in places like the Hawaiian Islands and the coast of Scotland, where Ampaire has already done some proof-of-concept recordbreaking flights).

In the air, everything is normal, familiar. It feels nearly exactly the same as flying any aircraft, the only persistent discernable difference is the variation in sound from the unsynced propellers. Otherwise, it is a fun, nearly 45-minute ride in the Skymaster around Ventura County, over the recent fire burn marks near Santa Paula. and down the coast before turning back toward CMA. On the way in and in a small descent, Seguin pulls the power back on the combustion engine, powers up the electric, and finds VY, which he says is what he looks for, in sight and sound, whenever he's prioritising the electric engine in level flight. Fuel flow drops

"Electrical fire and thermal runaway are the worstcase scenarios" to 3.8 gph. It is thrilling not because flying under electric power is different, but because it is the same.

The intention is not for this innovation to be limited to commercial operators, and while it might take a little longer, Ampaire intends eventually to bring its tech to the wider GA fleet.

"One of the other things that I think will be really impactful is that when you switch over to electric, you're able to reduce the cost of flying," says Noertker. "When you can reduce the cost of flying, you can now reduce the cost of going and getting a pilot's license. When you reduce the cost of a pilot's license, you enable more people to go get them. And it not only expands the number of pilots and enthusiasts in the industry, it solves the pilot shortage that the airlines are facing right now. It adds a positive feedback cycle into the industry."







- 1. The record-setting Electric EEL after completing its 12 hour endurance flight
- 2. Flying in formation to test performance
- 3. The team opening Ampaire's new HQ

The goal is to eventually have the testbed aircraft in Long Beach, but for now, the fleet will stay in Camarillo. "As they say, paperwork makes aeroplanes fly, and so experimental aircraft have their own set of added work that comes with it just to make sure that we're airworthy and complying with all the regulations," says Gillen. "It's not hard, it's just it's more frequent than on the certified side. Definitely not quite as fun as flying," which he says is "obviously the best part of the job."

THE NEW AGE

Ampaire's long-term goal is to be part of the electrification all of aviation. "There are a few things that we can be certain of. Number one is that electrification is driving a transition that's as big as the jet age," says Noertker. "Why do we call it the jet age? Because new propulsion changed everything. So where

are we today? New propulsion yet again, for the third time in history, a once in a century opportunity to change aviation. Now this doesn't happen overnight, and it has to progress over time. It starts with general aviation, regional aviation, and then up into the transport class. And it's really about just thoughtfully managing that transition. But that's the big opportunity as we see it."

Noertker is determined, and notes that the nature of the aviation industry is one of Ampaire's biggest challenges.

"This is an industry which is not familiar with innovation moving at the same pace that much of Silicon Valley is familiar with. Aviation has a lot of hardware in it, and it also has a lot of regulations. And this makes it challenging to move quickly because iterations on hardware take a lot more time and a lot more money. And highly regulated industries pull the ability to

"There are a few things that we can be certain of. Number one is that electrification is driving a transition that's as big as the jet age"

control your own destiny out of your hands in some ways and put it into the regulatory bodies. For those reasons, it's challenging for companies in this space to attract large amounts of capital," said Noertker.

While the next couple of years will determine Ampaire's future, the company seems well set up for success. Probably one of the most significant feats remains that they are flying, flying now, and flying their CEO with their technology. In 2023, Noertker, not yet a pilot himself, flew as a passenger into the Regional Air Cargo Carriers Association (RACCA) conference in the Skymaster.

"To fly into any of these airports and to be able to do so in your own aircraft is just really special. And I think it causes people to realise that this future that we're dreaming of isn't actually all that far away. It's just right on the horizon," Noertker concluded.



- 1. Hundreds of flight hours have been added to the EEL's logbook
- 2. An open day at the company's headquarters
- 3. The converted Skymaster during its endurance flight



WORDS David Rawlings IMAGES Various

Do you fancy a test of endurance?

The annual International Dawn to Dusk Competition is now open, and organiser Sebastian Pooley is urging helicopter pilots to take on the challenge and test their mettle.



HE DAWN to Dusk competition has been part of the flying culture of Britain for 61 years this year and is a unique opportunity for pilots to test their skills with a day of flying.

The competition offers a chance to enhance your flying, broaden your horizons, and embark on the adventure you've always dreamed of.

The rules state you can enter in an aircraft of your choice, so there are very few restrictions.

HISTORY

Established by the late Duke of Edinburgh Prince Philip, and the Tiger Club, the objective of the Dawn to Dusk is to encourage the most interesting employment of a manned aircraft within the limits of competent airmanship, and to demonstrate the capabilities of pilot and machine in a day's flying, in the hours between dawn and dusk, whilst undertaking an original and praiseworthy objective.

Sebastian Pooley, Managing Director of Pooley's Flight Equipment, organises the competition, which is a cause close to his heart. "People always tell me how much they've enjoyed the competition," he said, before describing how the competition has evolved over the years. "For the first three or four years of the Dawn

to Dusk, everyone would fly from Redhill on or around the longest day of the year you would see how far you could get between the hours of dawn and dusk before returning to Redhill. It was a test of endurance. This, however, caused an issue, because one pilot landed at Redhill and then didn't taxi back to the hangars. So, the airfield Land Rover was dispatched out to meet them. When they arrived, the pilot was asleep in the cockpit. They asked him what the last thing he remembered was, and he replied: 'Being on finals'. So we adapted the rules, to make sure it was safer, but the competition is still a test of endurance."

THEMES

ntrants must now complete a minimum of four hours of flight time, ensuring a significant challenge that makes the most of their time in the air. They must also choose a theme.

The themes can be anything a pilot chooses, but to stand out and win, it needs to be truly unique. "It doesn't really matter what you do. You know, it could be something very ordinary or something very personal," said Sebastian. "Last year one of the entries took a 100-year-old former pilot to Berlin because he was part of the Berlin airlift and it was the 75th anniversary. That was amazing. Someone else flew over film and TV sets



around Devon and Cornwall, another team completed a history of the Romans in Britain and travelled from Dover all the way up to Inverness.

"It's also an international competition. We had an Italian entry this year and they were covering the life of Francesco Baracca who was a very famous Italian aviator. Last year we had a team from Australia and previously a team from Canada."

JUDGING

There are four categories for scoring points. The categories are: the plan, the flight, the log and the challenges or advantages.

Each section is broken down. For the plan, points are awarded for originality, research and flight planning.

The flight is judged on airmanship, difficulty, distance, airborne time and weather conditions. The log will be marked on presentation and relevance as well as completeness and accuracy. And finally challenges or advantages will be broken down into pilot and crew

experience and equipment used.

Entry is free and really simple. All that is required is for the competitor to set themselves a challenging goal with a theme and fly it. You then need to write up a log of your preparations and flight. The judges enjoy seeing photographs from your flight and if you wish to include a video, please do.

The only limit on the challenge you set yourself is your imagination! Many choose to link their challenge with a charitable endeavour, raising money as they fly.

An entry can be flown at any time of the year, with the cut-off date for submission of your log falling on the last day of September. Entries received after this date will be entered into the following year's competition.

Every competitor who finishes the competition, in accordance with the regulations, and submits a log and report, will be presented with a certificate.

The awards will be available for presentation provided that, in the opinion of the judges,

"we had an Italian entry this year and they were covering the life of Francesco Baracca who was a very famous Italian aviator. Last year we had a team from Australia and previously a team from Canada"

there is a competitor eligible for them.

Every February there is an awards dinner at the Royal Air Force Club. "The club is very special," explained Sebastian. "There is a huge stainedglass window on the back staircase. Everyone gathers on the stairs with their awards and certificates for a photograph, showcasing the substantial amount of silverware which is up for grabs."

Sebastian expressed his enthusiasm for attracting more entrants this year, particularly from rotorcraft pilots. "It would be fantastic to see a helicopter pilot back in the competition," he said, before sharing his passion for organising Dawn to Dusk: "It's a really fun competition and every single year I get so many lovely emails from people saying how pleased they were that they took part. People find it quite addictive. Out of the 15 entrants we had in 2024, seven had competed before. So many people who completed the challenge last year have already signed up to do it again!"



All the winners from the 2024 Dawn To Dusk Competition posing at the Royal Air Force Club



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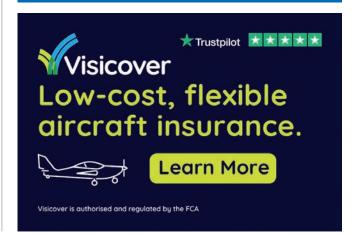
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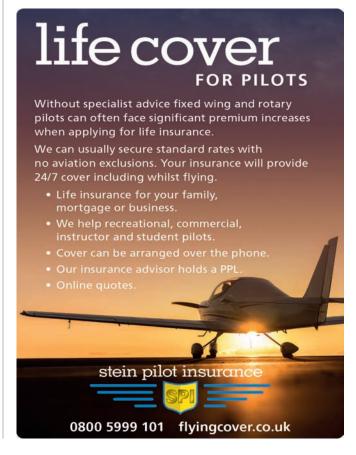
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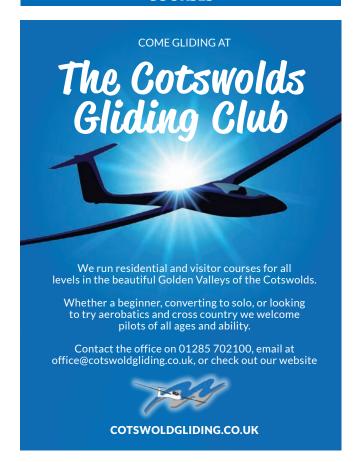
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