

AOPA UK

789NM IN A STEARMAN

Sue Girdler takes the classic aircraft from Kent to Prestwick

CIRCUIT TRAINING

Adam Winter offers advice on how to correctly join a circuit

TRIG'S LATEST

We look at the newest radios on offer from the UK's Trig Avionics



Going big with the Tecnam Traveller

Famed for its single-engine aircraft, Tecnam has switched gears with its 11-seat mini airliner. We get the inside track on the P2012



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GA IS THE GLUE THAT BINDS AVIATION

Before Christmas, together with about 80 guests from the General Aviation community and Members of the Houses of Parliament and Lords, I attended a reception held by the All-Party Parliamentary Group (APPG) on General Aviation. The Group's Chairman, the Rt Hon Grant Shapps, used the occasion to announce the establishment of the Government's first ever General Aviation Champion, Mr Byron Davies, who will advise and inform the Secretary of State for Transport, the Rt Hon Chris Grayling MP. It had been recognised that GA was "...the glue that binds the entire aviation sector together...". Byron had been the first Chair of the APPG until he lost his seat in the June 2017 General Election. Both Byron and Grant are pilots/owners and long-standing members of AOPA.

The APPG website (generalaviationappg.uk) is worth looking at as it becomes clear that the group has managed to enlist support from some big organisations, namely Airbus, AirlinesUK, British Airways, BAE Systems, London Luton Airport, Rolls-Royce, and Virgin Atlantic. All provide a short rationale for their support – a common theme being "to inspire the next generation into the magic of aviation" – so as to supply future aerospace requirements for commercial pilots, engineers, designers, and supporting roles. Another emergent theme, which is viewed as the one upon which all the other activities depend, is the vital need for a network of general aviation airfields. At the time of writing, the Rt Hon Sajid Javid MP, Secretary of State for Housing, Communities and Local Government, has promised to revisit the planning policy around airfields, previously regarded as ineffective in preventing strategically key airfields from being lost to redevelopment. This is a big improvement on his previously stated position of disinterest two months earlier. This change of position indicates that the Group now wields significant political muscle.

The APPG is setting up three working groups on Airfields, Airspace and Aviation Taxation, with members invited on the basis of appropriate expertise from the GA associations, typically CEOs and others having similar oversight. It was a revelation to discover that the group comprises of 116 parliamentarians from both sides of the House, of whom 4 – 5 percent are active flyers. It is clear that the majority have a strong interest in a GA airfield within their constituency and/or in supporting a key element of the multi-billion pound aerospace industry.

The scale of interest and awareness amongst the politicians is impressive, and provides hope that many of the aims and objectives that we, in AOPA, have been pushing for may eventually come to fruition. On a slightly irrelevant note, I could not help but notice how many attendees at the function had been presented with awards by AOPA – seven in all, including three winners of our most prestigious award, the Lennox Boyd Trophy – namely the Rt Hon Sir Gerald Howarth MP, Grant Shapps, and Mike O'Donoghue of GASCo. AOPA will provide the APPG with maximum support, and, likewise, I hope we can rely on your own continued support of AOPA. ■



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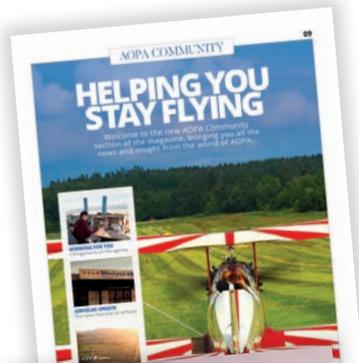
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EDITOR'S MOMENT

By the time this issue has landed on your doorstep, 2018 will already feel as if it's been around for quite a while. But the longer days, better weather, and the ability to spend more time in the air – or at the clubhouse – are all awaiting us, on the horizon.

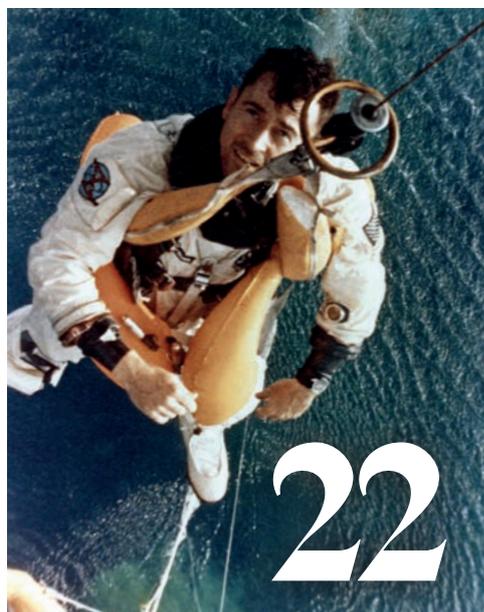
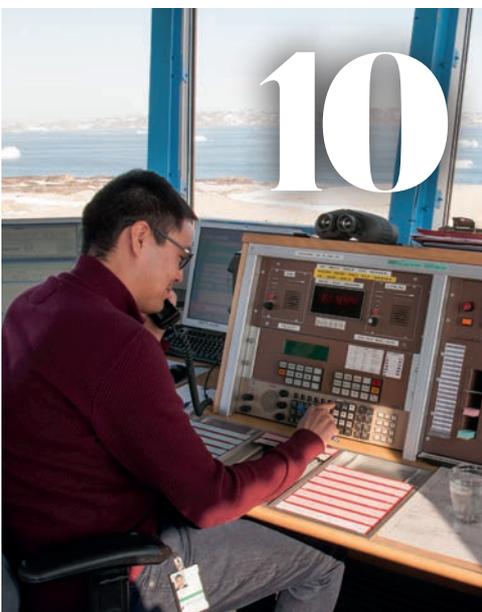
This issue is full of advice, flying adventures and everything you need to give you that boost to get back in the cockpit and go flying. If you're looking for a thrilling trip, read Sue Girdler's article about taking a Stearman up to Scotland to display. If you want some refreshers, Adam Winter and Nick Wilcock both offer pages of great advice for flying for both experienced and new pilots. And we also look at Tecnam's big step forward with its new P2012 Traveller, so there's something for everyone.

Although as I type this I can hear the wind howling at my office window, I am comfortable in the knowledge that the worst of winter is surely behind us and it's plain sailing flying from here on.

As always, blue skies...

David Rawlings

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IF WE ALL WORK TOGETHER WE WILL IMPROVE GA

The All Party Aviation Group (APPG) chaired by the RT Hon Grant Shapps offers the GA community an opportunity to influence the highest levels of government in respect of the director of travel for GA. The newly appointed GA Champion (Tsar) Byron Davis will talk directly to the Transport Minister Chris Grayling MP about the key concerns facing GA today, including taxation policies, aerodrome planning and airspace. The APPG also has the support of 108 members from both houses including some very well-known individuals – I should add that Haywards, the aviation insurance brokers, has been lending support too! I am also pleased to say that Lork Kirkhope is also involved, which is great news because as a former MEP he supported European GA by providing a voice in the EUP.

STEPS FORWARD

This is all very positive news and AOPA will be providing support and input as the work gathers momentum.

In January, I took part in a global online teleconference with participants from Europe, Australia, New Zealand and the USA – one of the questions I was asked was “what are you most excited about for the future?”. I replied airspace and technology and I went on to explain why.

You may have heard or even read about FAS (the Future Airspace Strategy) the UK’s approach to modernisation of airspace. I know many people have put in a lot of effort with the development of FAS. I don’t want to be accused of being negative as I believe I am a very positive person – the problem is the lack of iconoclastic thinking. We need a ten-year future vision with a road map that details how we move from today’s airspace design, to one where we can remove the airspace classes of today that provide known/known-intent environments for controllers in a situation where technology provides

improved navigation and surveillance. Eventually a single class of airspace may be all that is required to support a safe flying environment for all airspace users – maybe we should, in five years only, have Class D and G/ G plus (where G+ requires technology).

For GA we could have better routings, low fuel burn, smaller environmental impact – there could be few airspace change proposals as well as less infringements! GA could in fact end up with more airspace access – the point here relates to system-wide benefits and therefore if we come back to the goals of Single European Sky, there will be benefits to that network. So I think we have a very positive role to play here in developing ideas on how GA can have greater access to airspace. I am pleased to say that along with our partners, we have European funding in place for project GAINS (which is GA Infrastructure, Navigation and Surveillance), which is geared to making improvements for all GA airspace users. We will keep members informed about the project along the way. So I am excited about the work as AOPA – along with industry colleagues – continues to push for change. When it comes to next generation of avionics our starting point has always been, low cost, single step portable solutions – which is also and IAOPA position.

GAINS/GRIMASSE

The CAA recently announced an Innovation Workshop, which AOPA intends to participate in. It’s good to see the regulator thinking about how innovation through technology might be able to answer some of the questions about improved performance and safety on airspace. In 10 years from now there will be more GA aircraft using electric engines. Airspace and its management needs to be reformed. AOPA believes that in 10 years only, one classification of airspace will be needed – but we need

to plan now.

AOPA, along with its strategic partners, now have European Grant agreements in place, which means we have funding to carry out research in the following areas – GAINS (General Aviation infrastructure navigation surveillance). This project will look at where technology can be used to improve safety and efficiency in VFR and IFR operations, particularly with respect to improving surveillance and navigation. AOPA has always maintained that the starting point is low cost, portable equipment while recognising that the GA fleet is very diverse. This project will require extensive flight trials and some equipment upgrades – more to follow. GRIMASSE (General Aviation Rescue Capacity Improvement for the worldwide Adoption of a Safe Solution based on European GNSS). A consortium project together with Pildo Labs and Thalys. The plan is to look at how search and rescue could be improved through the next generation of ELTs (Emergency Locator Transmitter) and Galileo/EGNOS. If the amount of search time can be reduced then survival rates can be improved. In reducing the SAR time costs are also reduced. As these programmes develop we shall keep readers informed about the progress.

AOPA sees the need to be proactive in these areas whilst at the same time getting members involved. This is an opportunity for you to influence some future technological developments. If you would like to comment on anything in this article please email info@aopa.co.uk. ■



M Robinson

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Welcome to the new AOPA Community section of the magazine, bringing you all the news and insight from the world of AOPA...



WORKING FOR YOU

Infringements on the agenda



AIRFIELDS UPDATE

The news from the UK airfields



PPL CORNER

A refresher on circuits



AOPA ADVICE

Find out about FI seminars



WORDS Pauline Vahey

AOPA WORKING TOWARDS IMPROVING AVIATION FOR ALL

The latest updates from the meetings within AOPA that aim to protect you

The Members Working Group (MWG) and Corporate Members Committee (CMC) have regular meetings to ensure the world of General Aviation is being taken care of, and that the businesses involved in GA are protected.

In the latest CMC meeting, which took place on 29 November 2017 at AOPA's London HQ, the following subjects were discussed...

REGULATORY ISSUES

Colin Dobney, Head of Training at Stapleford Aerodrome, brought up the issues that FTOs are encountering with Wingly. Club members are hiring aircraft and advertising flight experiences at night around London in the Club aircraft, where the cost-sharing means the hirer gets

up to three quarters of the hire costs paid for (who knows, how is this regulated?). They are also using the Clubhouse as the place to meet, adding some degree of credibility.

The issues were that the hirers were not responsible for any of the costs associated with maintaining, insuring etc the aircraft, nor the overheads of running the Clubhouse from where they purported to operate. You could argue that the Club got the price of the hire, but had no oversight of anything else – including the experience of the pilot.

While sufficient for hiring the aircraft for personal use, it's different territory when using the aircraft quasi-commercially. Also, the Club itself could not offer flight experience flights at night around London because of the rules under which

"Corporate members were taking steps to ensure hirers were not using the aircraft in connection with Wingly or similar platforms"

BELOW: ATCs are still concerned with airspace infringements

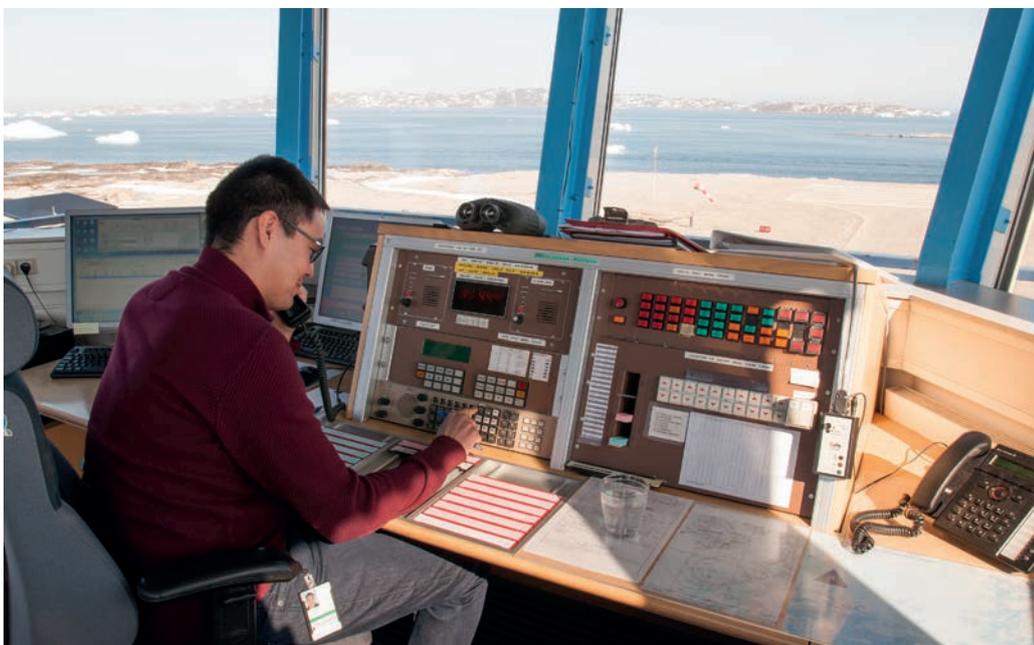
they operated, which were considerably more stringent than the Private hirer. Their insurance company Besso had made it clear that the onus was on the FTOs to prevent the seeming abuse. Other corporate members had seen this and were also taking steps to ensure hirers were not using the aircraft in connection with Wingly or similar platform flights.

White Waltham had been alerted to it after a visit by Border Force meeting a returning overseas flight. It was perceived that there was a lack of control despite the regulations allowing it. When the CAA had been approached for a legal opinion, it was suggested that the FTOs get their own, which was seen as sidestepping the issue. It was also commented that it would seem the CAA want to pick and choose what they want to 'gold plate'.

It was reported that the Police in Surrey and Sussex were asking for a list of trial lesson pupils for checking. This was seen as overly onerous and unnecessary. Martin Robinson noted that they get asked for a list of members, which they submitted.

AIRSPACE ISSUES

Mike Rowland, Director/Airfield Manager at Andrewsfield Aviation, had attended a local Airspace meeting also attended by NATS, Stansted Airport and other local airfields. Despite no changes in operations in nearly 30 years, the statistics



DATES FOR YOUR DIARY

Here are the list of upcoming 2018 dates for the Members Working Group and Corporate Members Committee.

MEMBERS WORKING GROUP: ALL SATURDAYS

- January 27th 50a Cambridge St.
- April 7th White Waltham
- June 2nd TBA - a Flyin to a Corporate Member
- September 29th White Waltham
- November 24th TBA

CORPORATE MEMBERS COMMITTEE: ALL WEDNESDAYS

- 28th March 50a Cambridge St.
- 27th June White Waltham
- 19th September White Waltham
- 28th November 50a Cambridge St.

presented to them showed one infringement in 2014 and then 14 in 2017. There had been a change in reporting six months ago and now everything 'alleged' to be an infringement is now a statistic. 45% of the infringements in 2017 were in the TMZ with the majority being four to eight seconds and posed no threat to any other aircraft. The margin of error was now 25ft. Since the whole community is now moving to using Mode S, the infringements have increased because they are now in the know. Actually, should some of them really be classified as infringements? Coupled with the fact that there is no clear CAA policy on GPS training, this was seen as a move to more controlled airspace. There was a discrepancy between industry understanding and NATS reporting of infringements. Now that the reporting was automated there was no discrepancy. The use of GPS, whilst being in the syllabus, was not tested. What was going to happen when drones became more prevalent? Please send all data and experiences to info@aopa.co.uk and they will be passed on.

TAXATION AND OTHER FINANCIAL ISSUES

John Walker reported that

a trial would begin in April 2018 for local authorities and the new taxation regime for local Authority Business rates. Any negative instances to be reported to AOPA please.

The All Party Parliamentary Group for General Aviation (APPG GA) had set up three working groups, one of which was focused on the taxation issues facing GA, including VAT on training and tax on fuel. Martin Robinson would be working with them.

CONFUSION OVER SERA RULES

Redhill had an issue with the SERA rules governing VMC operations. In Class D airspace they were unable to land or take off, i.e. transit only, if there was less than a 1500ft cloud base and 5km visibility, as Gatwick wouldn't renew their letter of agreement. Was this an issue with NATS? This was also seen as wholly inconsistent with the operations that were allowed at White Waltham.

What were the rules for private aircraft in private airfields and uncontrolled strips?

With the CAA FCL, the lack of experience was again apparent when they wrote first to the student rather than the examiners, so the examiner then does the CAA's work for them. ■

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- EST. 1957 -

Pooleys Flight Guide United Kingdom 2018
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WORDS John Walker **IMAGES** Cal Flier

LATEST NEWS ON OUR UK AIRFIELDS

John Walker offers the latest news and developments at the UK's aerodromes

There are airfields across the UK currently under threat of closure. Here are the latest developments, updated 2 January 2018.

ANDREWSFIELD

Braintree, Colchester and Tendring Councils are co-operating in developing a Local Plan for north-east Essex with an area including Andrewsfield airfield, earmarked for a garden

community with ultimately 10,000 homes. The definitive Local Plan was submitted for Public Examination on 9 October 2017 with the hearings due to start on 16 January 2018.

BLACKPOOL

Balfour-Beatty has sold their 95% interest in the airport and associated land to Blackpool Council (who held the remaining 5%

interest) for £4.25 million. The Council intend to fund the purchase through the sale of some airport land for industrial purposes. A public consultation on a draft masterplan for both the adjoining Enterprise Zone and airport ended on 21 December 2017.

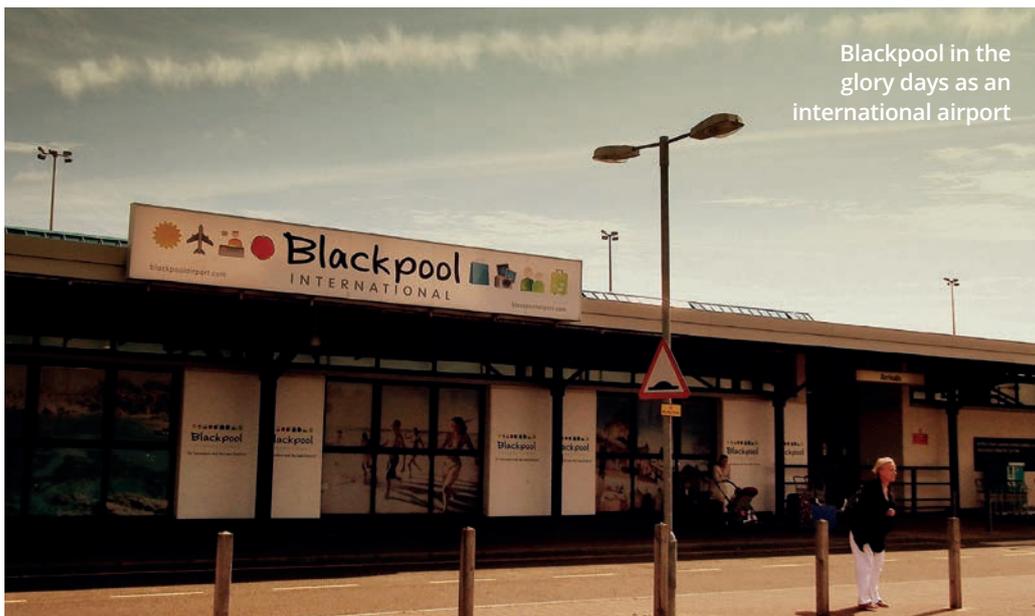
DEENETHORPE

Site accepted under the Government's Garden Village

scheme for development with up to 1,500 homes. The development is supported by the Brudenell Estate, the site owner. Full public consultation expected on a proposed site masterplan which is expected to be published early in 2018 prior to a planning application, expected to be made in Autumn 2018.

MANSTON

River Oak Strategic Partners intent to apply in 2018 for a Development Consent Order for the aerodrome as a Nationally Significant Infrastructure Project. The site owners are consulting on a revised masterplan which includes retaining 1,199 metres of the existing runway, relocating the existing aviation museums and providing homes with runway access. Following the consultation, a planning application for the revised scheme is expected to be made early in 2018. Thanet District Council's Local Plan submission is for mixed use development of the Manston site. ■



Blackpool in the glory days as an international airport

MOD SITES

The following MoD aerodrome sites are planned for disposal in the years indicated:

- Abingdon 2029: Site earmarked for Garden Village style development with ultimately 4,000 homes
- Alconbury 2023: Major part of site already being developed with 5,000 homes.
- Arbroath 2020: Angus Council have shown an interest in purchasing the site.
- Chivenor 2027: Local Government has been lobbying to keep a military presence.

- Colerne 2018: Interest in maintaining the airfield for aviation purposes.
- Dishforth 2031: Airfield site being disposed of but not included for any development in any emerging Local Plan.
- Halton 2022: Aylesbury Vale District Council's definitive Local Plan issued for public consultation does not include the airfield for any development.
- Henlow 2020: Site earmarked for mixed use development.
- Mildenhall 2024: Vision & Prospectus

- document for the site retains the aviation facilities including the runway.
- Luffenham 2021: Rutland County Council discussing Garden Village proposal.
- Wethersfield 2020: Airfield site being transferred to the HCA in 2020.
- Wyton 2018: Airfield is being sold off – DIO and local property developer Crest Nicholson proposal for up to 4,500 homes on site. Due to road infrastructure issues, site deleted from Local Plan for mixed use development including housing.

WORDS Adam Winter IMAGES Chris Leipelt

CIRCUITS - UNTANGLING THE MENTAL SPAGHETTI

With spring not far away, Adam Winter feels it's a good time to refresh yourself with the general rules for circuit joins, and how to approach an unfamiliar airfield

Once you have your PPL, please don't fall into the trap of turning up occasionally to do a few circuits or retracing your familiar training routes. You (and your friends/family) will soon be bored of it and your licence will become something you might renew one day. I apologise there for the depressing start to 2018. I'll start again.

It's 2018, Happy New Year, Happy Flying and clear skies for all. Let's get out there and see the country. I understand what might be stopping you – unfamiliar airfields. You've heard they can be busy or tricky. Perhaps you don't like the idea of landing at an unmanned airstrip while talking to a MATZ, or feel intimidated by a seemingly complex joining procedure. Generally in aviation you don't want to stretch your limits. But when it comes to having the confidence in mastering navigation, as well as approaching new airfields, then you will get the most out of your licence. Being prepared is key.

LET'S BEGIN

Let's start with the bog-standard airfield join. There are some very clear and logical rules about circuit patterns and how to join them. Intellectually you should have mastered the simple rule and pattern required to join a circuit. If not, or if it confuses you, sit down with a piece of paper, and draw a few. For every runway there will be four possible joins. For example an east to west runway will have a join

ADAM WINTER



Adam is a commercial pilot with more than 30 years' experience. His career has included bush flying in Africa and island hopping in the West Indies, as well as a stint in the airlines. He is also a physics teacher with three years' classroom experience.

for 27 left, 27 right, 09 left and 09 right. Draw these out with approaches for each from the north and the south. That will make eight possible patterns, and you should understand them from the comfort of your living room. However, you will be approaching the airfield from your plane, not your sofa. Let's think of how to work it out 'on the trot'. This is how I do it: I am heading in the general direction of the airfield, perhaps ten minutes or more to run, and I get the joining information. Let us say it is runway 24 with a left-hand circuit. I look at the direction indicator.

Look at the number 24. An aircraft taking off from the field will be taking off from the centre of the DI towards the number 24. I will be landing in that direction from the centre towards the number 24. Aircraft in the circuit pattern

will be taking off and turning left (downwards), so I am on the live side, the circuit side of the airfield (because I am heading about 020 degrees) and approaching from the south. The picture can be imagined on the DI. When I see the airfield I will approach at 2000ft to the right side of the runway. Once over it I will descend on the dead side (top left of the DI), making a left turn and join crosswind to the left side of the runway (as I see it on the DI over number 24 and down to the right). Left downwind, left base and then final (towards DI's 24 numbers from the middle to land). So I have the correct joining pattern and circuit in my head. All I need to do now is transfer that to the real runway, once I see it. For the same example, if the circuit is 24 right, by applying the same rule, I can see that I am on the dead side. This time, for the standard overhead join, I am going to have to get myself over the right side of the runway at 2000ft. I will then turn back on myself doing a right hand descending turn to be at 1000ft, to go crosswind (over the DI's 24 number). Again, try this for a few runways, find some pictures of DIs (Google) pointing in different directions.

GETTING CLOSE

The final point about this is, of course, that when you eventually see the runway, the numbers will be painted on the opposite side from the DI.

"Elstree Information G-AOPA is at Bovingdon request joining instructions".

"G-PA, standard overhead join, runway 26 right hand circuit QFE1010".

What is really going on here is that I told Elstree Information (so an uncontrolled field, as is Radio) that I am north west of them, and intend to land there. They have come back to me and told me that the preferred approach at Elstree is to join overhead for a right hand circuit runway 26. Now it is my choice what join to make. I deal with non-standard joins in the next paragraph. Using the method above I can see that I am on the dead side already. For the standard join I will have to go over the field to turn back on myself to descend. I might want to do it that way if Elstree is unfamiliar and I want to get a good look from above before descending, or if they are busy and feel I won't find a gap in the traffic easily. However I can also see that being on the dead side already I might as well descend to 1000ft (above the ground so QFE) and join crosswind, listening and watching out for any conflicting traffic. That is generally what I do. I can do this with confidence because I have a mental picture of who is out there and where they are, and I am keeping an excellent lookout all the time. I start to descend to 1000ft (QFE) on the dead side and announce "G-PA descending dead side". Then join crosswind and downwind directly. Circuit traffic have priority. If you are approaching an uncontrolled field (including ones with AFIS and Radio) and

Ensure you join
the right circuit at
unfamiliar airfields



intend doing a non-standard approach (eg at Elstree coming in on long final from the golf course or canal bend reporting points), this is something you should announce.

“G-PA will report canal bend for a long final”. The AFIS might tell you of other traffic in the circuit so you can time your approach accordingly, or might even advise against it if they are busy. You should heed their advice, but if for example a passenger is feeling unwell, announce it. The other aircraft will probably give way to you. If you are doing it because you know the extra time the overhead will cost you another £17 (that’s me!), then as you approach, even on a long final, you do not have the right of way, and should be prepared to go around for other traffic.

JOINING FROM LIVE

Another non-standard approach might be if you are joining from the live side and you can see the only other aircraft downwind. “G-PA joining downwind”. You are the captain. All the time giving way to circuit traffic. Eyes should

“Eyes should be outside nearly all the time looking for traffic you might have missed from listening out”

be outside nearly all the time looking for traffic you might have missed from listening out, someone in the wrong place or a non radio aircraft.

If you are going to a controlled airfield, the situation is of course that you do as they ask, repeat any clearances and request any variation from the standard. Confidence can also be gained from an easy flow of correct RT. Don’t babble. If you are joining dead side, the only call you need to make is when you are descending. You don’t have to announce your intention and reason for it unless there are others joining as well, in which case it is useful to them.

The only way to gain the experience is to practice, and the best way to practice is to be prepared in advance. Have a picture in your head of where you are when joining or in a circuit, and where the other planes are. If you are with someone, ask them to keep a good lookout for other planes.

In theory as mentioned above, one runway can have eight different approach scenarios. But at any given

time they will only be using one of them. Call the airfield in advance and find out! Tell the controller or AFIS or Radio operator you are coming in for the first time, ask what direction the circuits will be when you arrive.

The last thing to say by way of encouragement is really don’t worry if things get busier than you are comfortable with. You can go-around from any point in the circuit. Recently I was downwind with a student and someone joined downwind on a tight circuit inside us. Another plane ahead announced he was going to extend downwind (not a great idea as it forces everyone behind to extend) and there were two other planes in the circuit, one on the runway and one behind us.

“What should we do?”, asked my student.

“Let’s get out of here”.

“G-ZL downwind turning north and leaving the circuit”.

“G-ZL roger call for rejoin QNH 1014”.

Five minutes later it had all quietened down and we made a join direct downwind. ■

WORDS John Pett IMAGES Carl Nenzen Loven

FLIGHT INSTRUCTOR REFRESHER SEMINARS

John Pett explains why AOPA's FI refresher seminars we well worth attending

AOPA has been running Flight Instructor refresher seminars, under the auspices of the CAA and EASA, for the past 20 years.

AOPA now runs them three times a year at our headquarters close to Victoria Station in London. It is part of the process whereby Flight Instructors can maintain their Instructor privileges which are required to be revalidated every three years. For revalidation and renewals (less than five years expired) the necessary paperwork will be signed and validated at the end of the Seminar at no extra charge. If an Assessment of Competence should be required, this can then be arranged through the flying staff at the Seminar.

Although intended for FIs, there is no reason why PPLs or CRIs cannot attend the seminar – where they could well bone up and revisit the basics they may have forgotten in the time since they gained their licence. FIs from other EASA countries often come along as the attendance for renewal of the certificate is valid Europe-wide.

It is a two-day Seminar with 45-minute lectures on topics selected by the authorities and lasts for 6 hours each day. Topics include, amongst others, laws and regulations, forced landings without power, GNSS, stalling and spinning, as well as human performance and limitations, and take-off and landing. Interaction between the participants – who usually number between 15 and 20 – is felt by many to be one of the benefits of the gathering. Handouts are given

out on each of the lectures so that you have something to jog your memory after you have returned home.

The lecturers are led by David Scouller who has over 16,000 hours of flight experience in more than 210 types of aircraft. He is ably supported by ex-Concorde pilot Tim Orchard, Spitfire flyer Charlie Brown and Professor Michael Bagshaw, of King's College London, who wrote the definitive book on human performance and limitations.

Lunch is supplied on each day with tea and coffee at regular intervals. At the end a Certificate of Attendance is issued on behalf of the CAA, which confirms the attendance at the seminar by the participant. This then accompanies the SRG1135 form for revalidation – or renewal – of the Flying Instructor Certificate, which is sent by to the CAA.

"The lecturers are led by David Scouller who has over 16,000 hours of flight experience in more than 210 types of aircraft"

Future seminars in 2018 are scheduled for 2-3 May and 7-8 November, 2018. You may enrol for the seminars online through the AOPA portal – www.aopa.co.uk. Costs are £275 for non-members of AOPA and £240 for members – VAT is included in both sums (but in most cases may be claimed back from HMRC by the Instructor). In addition, further information on any aspect of the seminars, can be obtained from the AOPA Seminar Administrator – John Pett – at pettjohn@hotmail.com or by his direct phone line on 07754780335.

Also, handily located in the same building, is the AOPA Pilot Shop where everything required from an aviation standpoint can be obtained – including special deals on Bose headsets.

AOPA staff look forward to meeting you at a future seminar. ■



PPLs and CRIs are also welcome at the seminars – it helps to refresh your memory



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AOPA NEWS

General Aviation news from around the world

DIAMOND SOLD TO CHINA'S WANFENG AVIATION INDUSTRY

The Austrian aircraft manufacturer has been sold by Christian Dries

by David Rawlings

Diamond Aircraft Industries has announced the completion of the acquisition of Diamond Aircraft Group by Wanfeng Aviation Industry. In a statement Diamond said that: "This acquisition assures the continued long term future of the Diamond brand, with plans to increase global sales volume, expansion of the distribution and support networks, and continued design and development of piston aircraft."

Christian Dries, former CEO of Diamond Aircraft stated: "Diamond is my life's work. In the interest of a successful

long-term future, we needed to find the right partner to continue our good work. Wanfeng and specifically Mr. Bin Chen share my vision of the future of general aviation and are investing for the right reasons, with a long-term strategy and the resources to see their vision through."

"We were attracted to Diamond's leadership position in the market", said Chen. "Under the 25-year leadership of founder Dries, the Diamond team has developed a broad range of aircraft. Based on this excellent foundation, we intend to take Diamond to a long-term leadership position in worldwide General Aviation.

"Wanfeng Auto Holdings Group is a global company with more than 60 subsidiaries, with industrial headquarters throughout the world. The company employs more than 12,000 staff in six industrial sectors.

As one of the new visionaries of Chinese Aviation, Chen is committed to building a whole-industry chain in aviation, covering five business segments (Aircraft Manufacturing, Airport Management, Flight School Training, General Aviation Operations, and Flight Service Centres). Within only the last five years, Wanfeng has invested in numerous aviation



Mr Bin Chen will now head up Diamond Aircraft

projects throughout the world including the Czech Republic, Canada, United Kingdom, and China.

Wanfeng Aviation Industry is uniquely positioned to remain at the forefront of the global General Aviation market by acquiring one of the world's leading manufacturers of piston aircraft, and will strengthen their global presence by announcing their vision for Chinese and Global Aviation industries for decades to come.

Bin Chen will assume the position of Chairman of Diamond Aircraft Industries GmbH. Mr. Frank Zhang shall assume the position of Chief Executive Officer. Mr. Christian Dries will maintain an advisory function to help guide the new ownership and ensure the continued development of Diamond Aircraft Group. ■



The instantly recognisable Diamond DA42 will now be produced by Wanfeng Industries

BRITISH EUROPEAN AVIATION APPOINTED UK PIPER DEALER

by **Robert Care**

BEA recently announced its appointment as the exclusive Piper Aircraft dealer for the United Kingdom, Ireland and the Channel Islands as of the beginning of 2018.

Ron Gunnarson, Piper VP of Sales, Marketing, and Customer Support at Piper said: "We are delighted to add BEA to our global network of dealers. The company's reputation, knowledgeable personnel and five locations throughout the UK provide an ideal foundation for growing sales of new Pipers in this region."

BEA said it is confident that the Piper range will prove most appealing when combined with their Aeroplane Management Package, which includes

maintenance and after-sales support, insurance, hangarage, pilot training, aircraft management, and leaseback.

BEA was formed in 2010 and represents over three decades of aviation experience.

Sean Brown, BEA's CEO,

said: "We are ideally positioned to guide, support and provide a unique Aeroplane Management Package which will guide all current and future Piper customers through the selection, purchasing and operating phases of Piper Aircraft ownership". ■



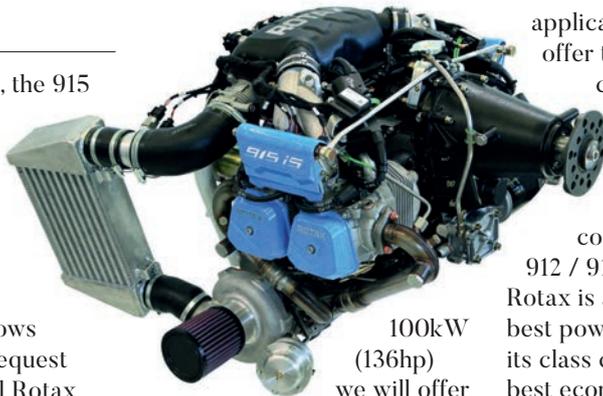
Piper's range, including the M600, has a new UK dealer

EASA CERTIFY 14HP ROTAX 915 ISC3 ENGINE

by **Lucy Fields**

Rotax latest engine, the 915 iSc3, has been certified by EASA with 5hp more than first expected, offering it 141hp in total.

"The Type Certificate (TC) allows Rotax to fulfil the request for a more powerful Rotax aircraft engine with proven reliability," said Thomas Uhr, General Manager BRP Rotax, vice president Powertrain BRP and R&D / Operations Lynx. "Not only has the certification been achieved within the promised time schedule but the engine has been certified to even higher power than originally announced. Instead of



100kW (136hp) we will offer 104kW (141hp) maximum power and 99kW (135hp) maximum continuous power. Once again providing the ultimate flight experience to pilots."

The increased power is available up to at least 15,000ft (4,572m) making the engine the perfect package for all fixed wings, gyrocopter and further

applications; it will also offer the possibility to carry up to four persons already in single engine application. Based on the proven concept of the Rotax 912 / 914 engine series, Rotax is again offering the best power to weight ratio of its class combined with the best economy while allowing for a high flexibility on the usable fuels. It delivers the most advanced aircraft engine technology resulting in low operating cost and ease of use. Up to this date already 12 OEMs have integrated the engine and will make their aircraft available very soon. Additional 47 OEMs are also already in the final stages of integration of this engine. ■

LOOK BACK... THIS MONTH 115 YEARS AGO



THIS MONTH, 115 YEARS AGO, CHARLES LINDBERGH WAS BORN

4 February 1902 saw the birth of Charles Augustus Lindbergh in Detroit, Michigan. Certainly one of the world's best known pilots, Lindbergh began flight training at the age of 20. In 1924 he was sent to San Antonio, Texas for a year of training at the United States Army flight schools at Brooks and Kelly Fields. He graduated at the top of his class, 5 March 1925, and was commissioned as a Second Lieutenant in the U.S. Air Service Reserve. He then became an Air Mail pilot and gained valuable flight experience. On 20 May 1927, Lindbergh departed New York in his custom-built Ryan NYP monoplane, Spirit of St. Louis, and 33 hours 30 minutes later, he landed at Paris, France, becoming the first person to fly solo across the Atlantic Ocean. During World War II, Lindbergh served as a civilian adviser and flew the F4U Corsair in combat missions with Marine fighter squadrons. He also flew the Lockheed P-38 Lightning with the Army Air Force. Lindbergh died on Maui, Hawaii, 26 August 1974.

AOPA NEWS HIGHLIGHTS**FIGHTING FLYERS FIRED**

Two pilots working for Indian airline Jet Airways have been fired after fighting in the cockpit on a flight from India to London. A female Captain and a male Captain acting as First Officer, had an altercation during the flight which resulted in the female pilot leaving the cockpit in tears and reporting that she had been slapped by the other pilot. At one point, both the pilots reportedly left the flight deck unattended - breaking universal flight regulations.

BOEING BOOSTED

Boeing reported that it set an industry record with 763 aircraft deliveries in 2017. Boeing, whose shares have more than doubled over the last 12 months, also reported that it grew its manufacturing backlog with 912 net orders, reflecting heavy and popular demand for its commercial product line. The order book represents approximately seven years of production.

NEW HUNT FOR MH370

The Malaysian Government has signed a one-off deal with Ocean Infinity, a US company based in Texas. The deal includes a speculative "no-find, no-fee" contract for 90 days, which has the potential to reward the research company up to \$70 million on a graduated fee scale, based upon search results, as well as the amount of area covered within the allotted time. The search will focus on an area in the Southern Indian Ocean the size of Wales.



The new-look cockpit for the P2008

UPGRADED TECNAM RECEIVES EASA APPROVAL

The Tecnam P2008JC MkII will feature a number of significant enhancements, including a new avionics suite

by **Robert Care**

The Tecnam P2008JC MkII will feature a number of significant enhancements. The original version was first launched in 2009 and was in need of an upgrade to keep inline with current trends. These include a new avionic suite, including a new design of both the dashboard and glare shield, thereby enabling the introduction of the Garmin's innovative G3X Touch display with a MD302 attitude instrument.

The Garmin G3X Touch, with its two large 10.6in displays, provides pilots with an intuitive split-screen mode with the option to view PFD, MFD, and engine information on a single display. Synthetic vision is a standard feature on G3X Touch, which offers a rich, three-dimensional

depiction of terrain, obstacles, water features, the runway environment, and more.

The P2008JC MkII is available with VFR Night. This version has a new improved lighting system featuring both ambient light and dimmer switches.

Tecnam have further improved the levels of comfort for passengers and pilots alike. Delivery options include a premium interior, with a dark styling of both the cabin and ceiling, and a new door design, coupled with premium leather seats. Customers may also choose a 2 or 3-blade propeller – helpful for pilots flying on noise-restricted airfields.

Bartolini Air, Poland's leading Flight Training Organisation, recently ordered seven Tecnam P2008JC MkIIs to add to their current fleet of eight singles

and three twins. Bartolini Air currently operate over 12,000 flight training hours a year, and qualifies more than 200 students, with many going on to rewarding careers in the world of commercial aviation.

Bartłomiej Walas, Bartolini Air's CEO stated: "This is a very proud day for the Bartolini Air team as we are the first Flight Training Organisation to introduce the Tecnam P2008JC MkII into service. The introduction of this updated version of the P2008JC is a significant addition to our all Tecnam training fleet."

"Tecnam is committed to constantly evolving and improving its product offering, to ensure our customers will always benefit of all the latest innovations the GA world has to offer" said Paolo Pascale, Tecnam's CEO. ■

SLOVENIA'S PIPISTREL TO BUILD AIRCRAFT IN CHINA

by **Robert Care**

Pipistrel has signed a deal with a Chinese entrepreneur to build a factory in China that will manufacture two of its latest aircraft, the electric power Alpha Electro two-seat trainer and the top-of-the-range Panthera four-seater.

Pipistrel is at the forefront of GA technology and has won plenty of awards

in its short history for its innovation and technological advances.

Ivo Boscarol (who will now control 51% ownership) and Danny Wu Hao (49%) entered as financial partners, and will provide capital investment required for the construction of Project Jurong.

The ownership of both Slovene companies, Pipistrel d.o.o. and Pipistrel Vertical

Solutions, remains 100% Slovenian as before.

The new company will produce two types of aircraft (Alpha Electro and Panthera Hybrid). Pipistrel d.o.o. will sell the technology and the rights for production and sales for the two aircraft models to Pipistrel Asia-Pacific for a significant part of SE Asia – all together 11 countries.

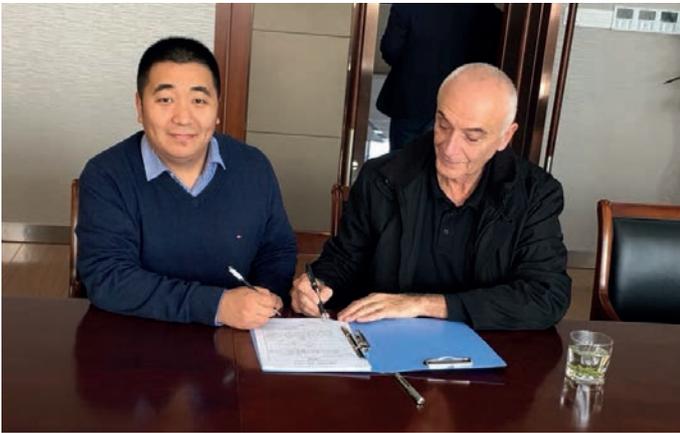
The PIPSTREL ASIA-PACIFIC General Aviation Technology Co Ltd will now be the general distributor of Pipistrel for China.

It will be in charge of realisation of the “Project Jurong”, the agreement to establish an aviation and tourist centre next to Jurong Lake national park. The agreement was signed between Pipistrel company and the government of the Jurong City, back in the beginning of December 2017, in the presence of His

Excellency the Slovenian Ambassador in China, Mr. Janez Premože.

During the next two years, a new airport, aircraft factory, villas compound, and a university department of aviation will be built in the “Project Jurong” centre. With its daughter companies, which will be established in the coming months. The Pipistrel Asia-Pacific will also take care of the acquisition of terrain, the construction and management of a 130ha airport complex, including its infrastructure, tourist settlements and all supporting activities.

The complex is located next to a highway, which connects it to Jurong City – just a 10 minute drive away – as well as Nanjing international airport (a 30 minute drive), from which a direct airline connection will be established to the Maribor airport in Slovenia in 2019. ■



Danny Wu Hao (l) and Ivo Boscarol sign the deal

SHAPPS FIRES BACK OVER LACK OF DIRECTION ON AIRFIELDS

by **Lucy Fields**

There has been a lot said about the future of GA in the UK over recent months, and there now seems a fightback after the latest round of talks concerning airfields. MP Grant Shapps, on behalf of the The All-Party Parliamentary Group (APPG) on GA, has written a scathing letter to Sajid Javid (Communities and Local Government) about the lack of direction on Airfields at Government level.

In a comprehensive and detailed response to the Secretary of State's October letter to the APPG, the all-

party group's Chair, Shapps said: “We believe your Department's position runs contrary to the Government's own stated policy ‘to make the United Kingdom the best country in the world for General Aviation’.”

The parliamentary group met with the Secretary of State Sajid Javid MP in March this year, to highlight the seriousness and urgency of the plight facing UK airfields. In the space of 20 years, the number of Civil Aviation Authority-licensed airfields has dramatically declined from 250 to just 96 today.

The all-party group notes

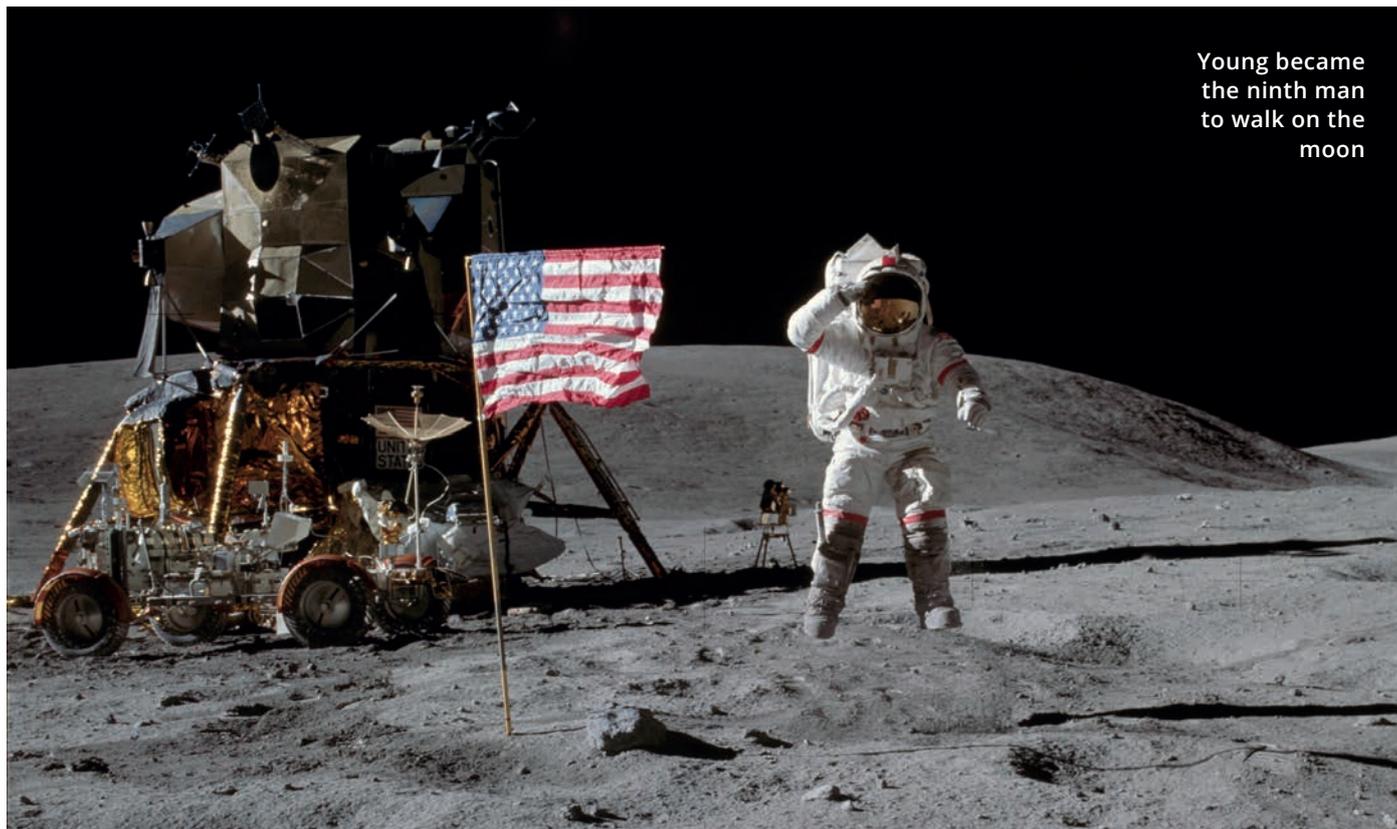
that the National Planning Policy Framework gives little assistance to maintaining the scarce number of existing airfields, instead delegating the planning decisions around these sites to Local Planning Authorities. As such, the group does not believe that a national network of airfields can be maintained “through a series of disconnected, disjointed local planning decisions.”

This is evidenced by the fact that dozens of airfields are under immediate threat of closure, with only one licensed airfield left in Hertfordshire, plans to close every licensed airfield in

Surrey, and 22 counties already with no licensed airfields whatsoever.

The parliamentary group's letter calls for urgent ministerial action to prevent a strategically important part of the UK's national transport infrastructure from disappearing completely, along with the 38,000 highly skilled jobs it provides, and the £3billion it adds directly to the UK economy.

The group has also called for closer engagement with the Department for Transport, which is the sponsoring Government department for General Aviation. ■



Young became the ninth man to walk on the moon

NASA REMEMBERS PIONEER JOHN YOUNG

The space agency's most experienced astronaut passes away at 87

by **David Rawlings**

John Young, NASA's most experienced astronaut, passed away on 5 January 2018 at the age of 87 from complications of pneumonia.

Young is the only NASA astronaut to go into space as part of the Gemini, Apollo and space shuttle programmes, and the first to fly into space six times.

"Today, NASA and the world have lost a pioneer. Astronaut John Young's storied career spanned three generations of spaceflight; we will stand on his shoulders as we look toward the next human frontier," said acting NASA Administrator Robert Lightfoot.

"John was one of that group of early space pioneers whose bravery and commitment

sparked our nation's first great achievements in space. But, not content with that, his hands-on contributions continued long after the last of his six spaceflights -- a world record at the time of his retirement from the cockpit. "Between his service in the U.S. Navy, where he retired at the rank of captain, and his later work as a civilian at NASA, John spent his entire life in service to our country. His career included the test pilot's dream of two 'first flights' in a new spacecraft -- with Gus Grissom on Gemini 3, and as Commander of STS-1, the first space shuttle mission, which some have called 'the boldest test flight in history.' He flew as Commander on Gemini 10, the first mission to rendezvous with two separate spacecraft

in the course of a single flight. He orbited the Moon in Apollo 10, and landed there as Commander of the Apollo 16 mission. It was as Commander of Apollo 16 that he became only the ninth person to walk on the moon, but he was fortunate that it happened at all. The lunar landing



Young became the first astronaut to fly six missions

was almost aborted when a malfunction was detected in the engine system. It was determined that the problem could be worked around, and the mission continued.

On STS-9, his final spaceflight, and in an iconic display of test pilot 'cool,' he landed the space shuttle with a fire in the back end.

"I will always remember him as the classic 'hell of an engineer' from Georgia Tech, who had an uncanny ability to cut to the heart of a technical issue by posing the perfect question, followed by his iconic phrase, 'Just asking...'"

"John Young was at the forefront of human space exploration with his poise, talent, and tenacity. He was in every way the 'astronaut's astronaut.' We will miss him," concluded Lightfoot. ■

NATS LAUNCHES PRE-NOTIFICATION TOOL FOR GENERAL AVIATION PILOTS

by **Robert Care**

The tool, which was developed in response to a controller survey, will give pilots the option to submit their notification on the portal at least 60 minutes before their intended crossing time, so NATS controllers can prepare for their arrival – helping pilots with their requests and enabling more efficient use of the airspace.

The tool will be part of a wider Airspace Users Portal that will host all non-standard flight requests in one place later in the year – such as those for balloon tethering, unmanned aerial vehicles (UAV) and general aviation (GA) aircraft.

Tammy Storrow, NATS Terminal Control Safety Improvement Specialist, said: “Under the current system for General Aviation, pilots wishing to transit into controlled airspace, the air traffic controller responsible has no prior knowledge of the request and therefore has little opportunity to formulate a potential plan for the crossing.

“Pre-notification is

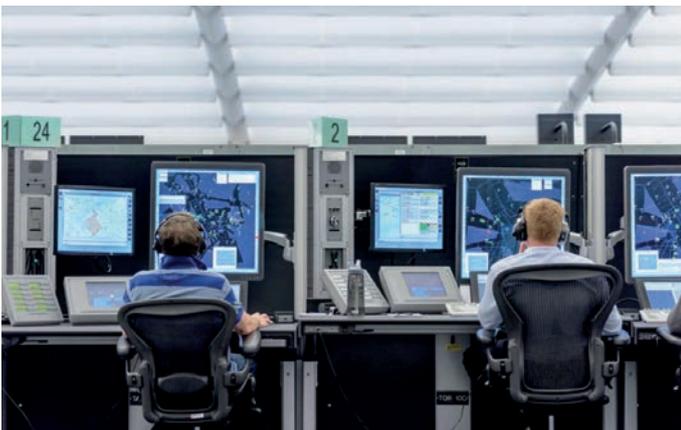
especially important in today’s busy airspace where complex air traffic scenarios can develop rapidly. The new tool will enable our ATC units to see the requests well in advance and plan ahead, which will benefit everyone involved.”

The pre-notification tool is now available on NATS portal.

At the recent Airport Operators Association Awards, NATS was awarded the Best Environment Initiative prize.

The accolade acknowledged the delivery of NATS’ Environmental Management System across UK airport control tower operations over the past 18 months; reducing emissions and noise from airspace operations, setting objectives to reduce energy consumption and water use, and improving the management of waste.

Mike Stoller, NATS Director Airports said: “I’m delighted that the teams have been recognised. It’s good for our reputation and in our day-to-day relationships with customers to support and enhance their environmental performance.” ■



The pre-notification system will ease the pressure of ATC



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WORDS AND IMAGES Sue Girdler

A STEARMAN TO PRESTWICK

Sue Girdler of TG Aviation in Kent was offered the chance of a lifetime to fly the company's Boeing Stearman up to Prestwick for a display... what do you think she said?



SUE GIRDLER DISTANCE FLOWN 789 NAUTICAL MILES HOURS FLOWN 13 HOURS 50 MINUTES

I was sat in the office at Lydd when Dan Griffith called to ask if I would like to display the Stearman at Prestwick. He was taking a Dragonfly and they were looking for other aircraft to display. Without hesitation, I said "yes" but I am not sure that a trip like this was quite what Craig Brierley, our Stearman instructor, had in mind when days before, he said "you just have to be more confident".

Having said yes, the next step was to supply a quote. The only problem was my chart ended at Doncaster so a quick call to Janet at Polar and an old chart (for quoting purposes only) was borrowed. It was at this stage that reality set in; at least six hours each way, three refuelling stops, at least 12

landings on tarmac and high ground to fly over in an open cockpit in August/September.

The quote, to my surprise, was accepted. Now I had to deliver. The only advice from Craig at this stage was "don't get too cocky" – good advice!

Once the Herne Bay Airshow was done I started to concentrate on the flight to Prestwick. I needed to pack for the two of us – the aeroplane and me. That meant oil, tie downs, spark plugs, cowling spanner, absorbent pads, screen clean etc for the aircraft. Then there was the flying kit and clothes for me.

I had to be in Prestwick by the Friday, ready to fly, so needed to leave by Wednesday at the latest to be there by late Thursday afternoon. The forecast for Wednesday was poor (and did in fact prove

correct) so I set off on Tuesday, planning to overnight at Doncaster where 2Excel had very kindly agreed to hangar the aircraft.

THE ADVENTURE BEGAN

I got airborne out of Pent Farm, with terrible feedback on the radio for the first 20 minutes, until I remembered to hit the squelch button! My first stop was Duxford and on arrival I was offered a choice of either the grass or the tarmac runway. I desperately wanted to accept the grass but knowing the next landing would be Doncaster on tarmac (my first on tarmac for some time!) I elected the tarmac. With the aircraft refuelled I was soon on my way.

The weather en route to Doncaster was poor and I had to decide whether to press on or turn back. I knew the

weather at Doncaster was good so hoped my decision was a calculated one and not driven by "press-on-itis". Arriving at Doncaster, I was given a straight in for runway 02, and on landing a "follow me vehicle" was sent to collect me – which was helpful. Trying to read an airfield plate whilst writing down taxi instructions, and weaving from side-to-side to avoid hitting something can be a challenge in an open cockpit aircraft, and you don't want anything disappearing in the wind.

I wasn't expecting the weather to be suitable in the morning and sitting having breakfast it started to rain a little. However, by the time I was back at the hangar, after refuelling the Stearman, the weather improved and I was on my way again.



Doncaster to Carlisle was the leg that concerned me most. It was two hours (leaving one hour fuel reserve), over high ground and no diversion airfields available over most of the route. The flight went well and the scenery was spectacular. I had to climb to 3500ft in places, which was cold but safe. The landing at Carlisle was not my best and I made a note to the effect that two hours in an open cockpit getting cold needs a conscious effort to remember landing checks, especially "feet on the floor clear of the brakes".

The staff at Carlisle were very welcoming which, when you are operating alone, makes a big difference. After a bacon sandwich and call to Prestwick I was on my way.

The scenery was spectacular and I was soon talking to Prestwick. There are a number of Visual Reporting Points and by the end of the weekend I had managed to get my head around them – but "Dalrymple" and "Doonfoot" were initially a challenge over the RT.

"Doncaster to Carlisle concerned me most. It was two hours over high ground and no diversion airfields available over most of the route"

BELOW: The Stearman was the star of the show, no matter what airfield it landed at on its 789 mile journey

Prestwick were on runway 30 but as I got close I was offered Runway 21, which was more into the wind, and this time the landing was better. I was taught right from the beginning that you do not stop flying the Stearman until she is safely in the hangar. Well, she was, and I had finally arrived in Scotland.

Thursday was spent cleaning the aircraft and sorting myself out. Around 17:00 Dan arrived in the Dragonfly belonging to Shipping and Airlines.

On Friday the Stearman was to do two flights along with the Dragonfly and Catalina. This gave me the opportunity to have a look at the seafront display site, which I have to say was ideal. Slowly more aircraft arrived, and late afternoon Steve and Annie Mallion arrived from Lydd. It turns out that Lydd is one of the only organisations to have an F34 fuelling rig required to refuel the F16, so Steve and Annie drove all the way from Lydd with the equipment on the Friday, and back again on the Monday. When they were not

refuelling the F16 they helped and supported me for which I was very grateful. Operating without a support team is a challenge, but I was shown so much kindness and given so much help and support it was not an issue.

So finally, the day arrived to display the Stearman. I was to display after the Boeing KC-135 Stratotanker, but I wasn't happy with the two-minute gap between displays, given its size and the last pass was to be slow with gear, flaps, etc down. Wake turbulence can be very dangerous, and I certainly didn't want to end up with an unscheduled aerobatic display, so the gap was increased, which worked fine.

I am told there were 65,000 people there but I was so focused on the display I forgot to look.

From Sunday onwards it was downhill all the way. We all knew the forecast was poor and at the time I was due to display it was raining hard. Rain will strip paint off the aircraft so I couldn't fly. Some teams



Sue (c) with Steve and Annie Mallion who had driven to Prestwick from Lydd



had scrubbed after displaying on the Saturday and headed home while they could, which meant there was room to slot me in the flying programme later. But when the time came the organisers made the decision for me to scrub as the weather was at its worse. I don't suppose I will ever get over the disappointment of not being able to fly on the Sunday because of the weather, but at least I had achieved the aim of displaying in Scotland.

Based on the forecast I had already made the decision to not attempt to depart on the Monday, but I still wanted to go in and refuel the aircraft while it wasn't raining and look at some alternative routes back, based on the weather.

A number of aircraft did depart and sometimes the hardest decision is not to follow, but it was the right decision. All but one of them had to divert back. The Red Arrows were due to do a fly-past over the new Queen Elizabeth Bridge on the River Forth at Edinburgh and then recover to Scampton.

However, Scampton was below limits and they had to recover at Prestwick. When they landed, Monty (Red 1) who I knew from our Manston days came and found me and said I had made the right decision to stay on the ground. It was nice to have confirmation from the Leader of the Red Arrows.

No wonder Mike Ling (Red 10) laughed as he passed me, charts everywhere trying to find a route home! It had taken them 45 minutes to fly from Bournemouth to Prestwick in the Hawk whereas it had taken me six hours 35 minutes from Pent Farm to Prestwick in the Stearman.

So once again it was back to the hotel and time for a little shopping, get my shoes re-heeled and wash some socks. The life of a display pilot isn't all glamour and excitement!

The forecast for Tuesday was poor – it was 14:30 before it was good enough to taxi for Carlisle. After goodbyes all round and a promise to let everyone know when I got home safely, it was off to

"It had taken them 45 minutes to fly from Bournemouth to Prestwick in the Hawk whereas it had taken me six hours 35 minutes from Pent Farm to Prestwick in the Stearman"

BELOW: TG Aviation offer flights in this stunning aircraft - it's used as was intended, to be up in the skies

Doonfoot for the final time, then onto Turnbury VOR before weaving round the taller hills to Carlisle.

With not much time for a turnaround and the weather still nothing to write home about, I made the decision to stay at Carlisle. With the aircraft fuelled and hangared it was off to the pub for the night. Cross winds were due to be a problem the next day so the evening was spent planning and preparing for the long day ahead.

After a good breakfast it was back to begin the flights back to Pent Farm. With the cross wind at Doncaster likely to be a bit too much of a challenge, I elected to go east and land at Leeds East (The old Church Fenton Airfield). However, I routed south to start with, following the M6 to Penrith, and then picked up the River Ure. My reasoning was that rivers don't flow over hills, so if the cloud was sitting on the tops of the hills, as it had been at times on the way down from Prestwick to Carlisle, I should be able to route through



the valleys. Note for future reference, whilst rivers may not route over hills, they can route through them!

The scenery was once again spectacular, although it was a bit turbulent. So I turned the aircraft on the rudders a lot, rather than banking, as I was a little worried that a gust would catch us and tip us over. Luckily towards the end of the flight the weather picked up, and I was able to cross over the hills as I had a route south to avoid a restricted area, where a military exercise was taking place. Once clear of the hills it was south to Leeds East.

So far I had managed to be reasonably organised, having the right plates to hand for each sector. However, having started up I suddenly realised that I had forgotten to take out the Carlisle plates and replace them on my knee board with the Duxford plates. This meant shutting down, un-strapping, climbing out, retrieving the plates from my flight bag in the rear locker, re-priming the engine, climbing back in and

starting all over again!

This sector led me down the east of Doncaster and then direct from Gamston VOR to Duxford. I was given MATZ penetration by RAF airfields when required and finally arrived at Duxford, where I was asked whether I would like the grass or tarmac. With the wind across both and no more tarmac landings required I opted for the grass. Unfortunately I made a real mess of the landing, bouncing so high that I thought it better to go around and give the landing another try. Thankfully on the second attempt I made a better job of it.

All that was left now was to make my way safely back to Pent Farm. As soon as I was airborne from Duxford I gave Stansted a call in the hope of getting a clearance through their overhead, but the frequency was very busy and I was told to "standby". As the alternative route was planned via BKY and BKP VORs I continued that way, remaining clear of Stansted.

"Unfortunately I made a real mess of the landing, bouncing so high that I thought it better to go around and give the landing another try"

It was then over Stapleford through the Southend Zone, with a clearance, and finally on to Pent. As I have already said, it is really important not to stop flying until the aircraft is in the hangar, and Pent had one more surprise in store for me – a very gusty and strong crosswind. I was determined not to fail and to get the aircraft on the ground in one piece. I think Craig would have been proud, I was certainly grateful for those few words: "you just have to be more confident".

Denis Holton had been at Pent to see me off, and he was there to welcome me back. I have to say I was very grateful because until I shut down that engine I had not realised how exhausted I was. His help getting the aircraft unpacked and put safely away in the hangar once more was so much appreciated.

My thanks go to all those that made this possible, for the kindness and friendship I found everywhere I landed, and to The Scottish International Air Show for inviting me to display. Would I do it all again? Of course. ■

BELOW: The scenery was spectacular (when it was clear), and waiting for take-off near to something that goes a little faster



WORDS David Rawlings IMAGES Tecnam

Entering the airlines

With the second prototype recently taking flight, David Rawlings thought it would be a good time to sit down with Tecnam and talk about its latest aircraft – the next-generation P2012 Traveller





Tecnam is one of the newer names in aviation, they have been designing and building aircraft since 1948. The Italian manufacturer is famed for its single-engine, high-wing aircraft. But in recent years it has started to branch out.

The P2006T, was Tecnam's first step into the twin-engine category. This four-seat, Rotax-powered aircraft was a hit, not only in the civilian market, but also as a maritime patrol aircraft, multi-mission aircraft, and recently has been used as a multiengine trainer for the Italian Air Force. After the success of this aircraft, Tecnam were approached by Cape Air to develop an aircraft for them. Cape Air is a regional airline based in Massachusetts. It currently operates over 85 aircraft including Cessna 402s, Britten-Norman Islanders and ATRs. In September last year, Cape Air announced a deal with Tecnam for 100 of the P2012s to refresh its fleet.

Walter Da Costa, Global Sales Director of Tecnam, acknowledges that the deal was a step in a new direction for Tecnam. "Yes, the P2012 Traveller is a big step

forward for our company," he explained. "The project all came about from Cape Air, and was a specific request from them. They first began talking to us around seven years ago."

So for a company that was used to dealing in single-engine Rotax-powered aircraft, a huge decision had to be made on the back of this request. "After we had spoken to Cape Air about their request, we first decided to do a deep analysis on the current market to see if it was viable for Tecnam," said De Costa. As you can tell by the article, Tecnam decided to push forward with the project. "We chose to go ahead because the market has been anticipating the arrival of a next-generation 11-seat aircraft," said De Costa. "There are hundreds of 'heritage' aeroplanes in the FAR23/CS23 category currently in service around the world being used by airlines, and they are coming to the end of their useful commercial life. So airlines around the world have been demanding a replacement for hundreds of aircraft." After Tecnam decided to go ahead with the P2012 Traveller they announced it at AERO

"I climbed to perform our pre-planned manoeuvres to check the basic behaviour of the aircraft... it responded exactly as expected"

Friedrichshafen in 2011 and it was full steam ahead.

When the design process took place it was decided to stick with some traditional Tecnam features, such as the high-wing and fixed landing gear. However the company knew that something more powerful was needed for an airliner so the Lycoming TEO-540-C1A was chosen as the engine of choice. It's a direct-drive six-cylinder, horizontally opposed, turbocharged, air-cooled engine. It has electronic fuel injection, electronic ignition and a down exhaust. Tecnam said its main advantage is the economic fuel consumption. And the active engine protection it affords against knock, overboost and temperatures, guarantees a trouble-free engine life compared with other old-generation, turbocharged engines.

It took until July 2016 for the P2012 to make its maiden flight – which was witnessed by Tecnam's founder Luigi Pascale, who sadly passed away in 2017. Seeing this latest development for the company was a big step and MD Paulo Pascale said at the time: "We have witnessed the beginning of new era for Tecnam. The Tecnam design team have answered all these customer needs [of reliability, efficiency and passenger comfort] with the P2012 Traveller. We feel we are contributing to real innovation in aviation."

Tecnam's test pilot Lorenzo De Stefano has often claimed the P2012 has always performed faultlessly no matter what manoeuvres have been asked of it. "After a smooth take-off, I climbed to a safe height to perform our pre-planned manoeuvres to check the basic behaviour of the aircraft, engine and flight controls. The aircraft responded exactly as expected. After a couple of circuits around the airfield, I landed and the



Two Lycoming engines are a step in a new direction for Tecnam

Lorenzo De Stefano,
Tecnam's test pilot,
loved flying the first
P2012 prototype





More than 100 units of the P2012 have been ordered; the aircraft is set to take over the current ageing fleets

Traveller stopped in a very short distance. I am really excited about the Traveller programme," said De Stefano after his maiden flight.

Since that initial flight, the first prototype has flown more than 250 hours – some of those have included demo flights with potential customers, which Tecnam say were very promising. "All of them agreed that this aeroplane is so easy to fly and it does not require much experience from

pilots. It has incredible performance, comfort and safety," said De Costa.

IN THE OFFICE

The avionics suite is based on the Garmin G1000 Nxi, composed of two 10in PFDs and a single central 12in MFD. Remote redundant AHRS and ADC provide the main flight and attitude information whilst a backup is provided by a MD-302. Communications and navigation are based on dual remote units, which

"Everyone agreed that this aeroplane is so easy to fly and does not require much experience from pilots"

provide selectable data on the cockpit screens. An optionally provided Flight Management System keyboard allows insertion of frequencies and waypoints, while another optionally provided Garmin Flight Stream device allows an immediate and wireless link between flight suite and portable devices, such as tablets or smartphones for immediate introduction of flight plans, waypoints, routes and frequencies.

A single Garmin GMA 350C audio panel manages the ATC and internal communications, with several facilities such as 3D audio and separation of pilot/co-pilot communication channels. The standard avionics suite is then completed by the latest generation Garmin Automatic Flight Control System, with three axes of operations and provided by a yaw damper (selectable also when A/P is OFF). A/P mode controller, installed on the top of flight deck, allows immediate



Thanks to the avionics, the P2012 will be easy to fly

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PASSENGER COMFORT

One of the main differences between the P2012 and 'heritage' aircraft in the same class is that the Traveller's fuselage measures are constant for the whole length. The elder aircraft in the same bracket traditionally feature a tapered fuselage in the back portion, there providing less space – especially disadvantageous for passengers seated in the rear rows. The P2012 will have the advantage of having a cabin with constant measurements for its whole extension, so that the space remains the same for all passengers and seats.

FROM NOW UNTIL 2019...

At the start of 2018 Tecnam announced that the first flight of its second P2012 had just taken place. "S/N002 is our conformity aeroplane and is now flying. This plane will allow us to go through all certification processes until we get EASA's and FAA's Type Certification at the end of 2018," explained De Costa.

Tecnam has gone full steam ahead with the Traveller. It has already promised the first 100 to Cape Air, and at AERO Friedrichshafen it announced its Slot Deposit Programme, receiving orders from operators in Argentina, Russia, and the South Pacific. So where does Tecnam see its biggest market coming from? "This plane will be marketed worldwide because currently there is not a replacement of the old models which are coming to the end of their useful commercial life," said

"We can guarantee that the P2012 will be a very affordable aeroplane with significantly improved operating costs"

De Costa. "To give you some numbers from GAMA: in the US more than 1,100 piston aeroplanes operate as Passenger Carrying Platforms. They have now an average age of 45 years and within 20 years they will be 65 years old. However, the active worldwide fleet of 9-seat airliners are greater than 2,000, but more than 11,000 aircraft need to be replaced," he added.

For those organisations looking to replace their current fleet, the big question is what will the operating costs be? Tecnam hasn't said anything concrete yet, but it is confident that the P2012's figures will be extremely competitive. "We will release the numbers in the next few months," said De Costa. "But we can guarantee that the P2012 Traveller will be a very affordable aeroplane with significantly improved direct operating costs, more efficiency, and modern maintenance procedures."

With a price of €2,200,000 the Traveller needs to deliver in a tough market, and Tecnam is confident because it claims it's the first of the next-gen of twin-engine piston airliners. "This new generation plane is unique in its class, because there is not a competitor with the same technology, innovation, features, and flight characteristics. There will be good advantages in terms of operational cost of this plane if you compare the Traveller with the actual heritage aeroplanes on the market," said De Costa.

So with the P2012 well on its way to certification, surely Tecnam are looking towards a jet? Rumours abound about the Italian company producing a turbo fan aircraft – including many pages and posts on the internet and even a press release from May 2015 on its own website, but when pushed we were told that there are no plans on the horizon. Time will tell. ■

TECH SPEC P2012 TRAVELLER

PERFORMANCE

Speed VNE 220kt/407km/h

Stall speed - Take-off 70kt/130km/h

Stall speed - Landing (Full Flaps) 65kt/120km/h

VMC 74kt/137km/h

Best RoC 1210ft/min/6m/sec

Take-off run 415m/1362ft

Take-off distance 690m/2264ft

Landing run 250m/820ft

Landing distance 500m/1640ft

DIMENSIONS

Wingspan 14m/45.93ft

Length 11.8m/38.6ft **Height** 4.40m/14.4ft

WEIGHTS

Ramp weight 36018kg/7986lb

Max gross weight 3600kg/7937lb

Max landing weight 3600kg/7937lb

Useful load 1332kg/2937lb

Fuel capacity 800lt/212US gal



The P2012's big selling point is that Tecnam claim the operating costs will be cheaper than current options



WORDS Nick Wilcock IMAGES Various

PERFORMANCE ENHANCING AIRCRAFT...

At the recent AOPA Training and Education Committee meeting, it was agreed that committee members should pass on some hints, tips and general reminders from the experience they've gained flying and instructing in light aircraft. In this month's article, Nick Wilcock provides a few reminders about aircraft performance



I 'VE GOT IN, BUT CAN I GET OUT AGAIN? This isn't simply a question which lobsters ask themselves from the bottom of a pot, but also applies to the operation of light aircraft, particularly when visiting small, unfamiliar landing sites.

My introduction to the world of light aircraft flight instruction came when I was serving at the University of London Air Squadron, the RAF's premier UAS at RAF Abingdon. We used the excellent Scottish Aviation Bulldog and operated from nice long tarmac runways. The Bulldog had quite decent performance – even with two chunky occupants and full tanks – so performance was never really much of an issue, even during the few days the UK thinks of as summer.

After I'd obtained my R/BCPL/ FI rating through the CAA crediting system – which was available to RAF QFIs in those days – I applied to instruct for the flying club at a nearby RAF aerodrome, which operated the PA28 Warrior II and Cherokee 140C from a 10000ft tarmac runway.

My only previous experience of the PA28 had been 23 years earlier at Weston-super-Mare aerodrome. It had seemed much bigger than the Cessna 150 on which I obtained my PPL, but I did recall that flying it with three on board and $\frac{3}{4}$ tanks had made one landing a bit firmer than I'd expected, but that was about all. My FI conversion consisted of a trip to the maintenance aerodrome and back in the Warrior, then another trip in the Cherokee a few days later. 'Standardisation' consisted of "Just teach the way you do in the Bulldog" and that was it. My first day of instructing came some 10 days later, involving slow flight, stalling and circuits in the Cherokee. RAF Benson was happy to take me for circuits as the resident UASs were on block summer leave, so the aerodrome was very quiet. I'd been told to take a couple of students, neither of whom was exactly 'petite', but that didn't seem an issue to me – I'd do the slow flight and stalling with the first chap, then some circuit work before landing, switching students and doing some circuits with the other one. "Oh – and pop in to Oxford to fill it up on the way home, would you", were the CFI's parting words as I walked to the aircraft.

All went well for both students; the refuelling was done pretty quickly and it was time to set off home. In those days, Oxford had RW27, an 880m grass runway, which was the one which the wind was favouring.

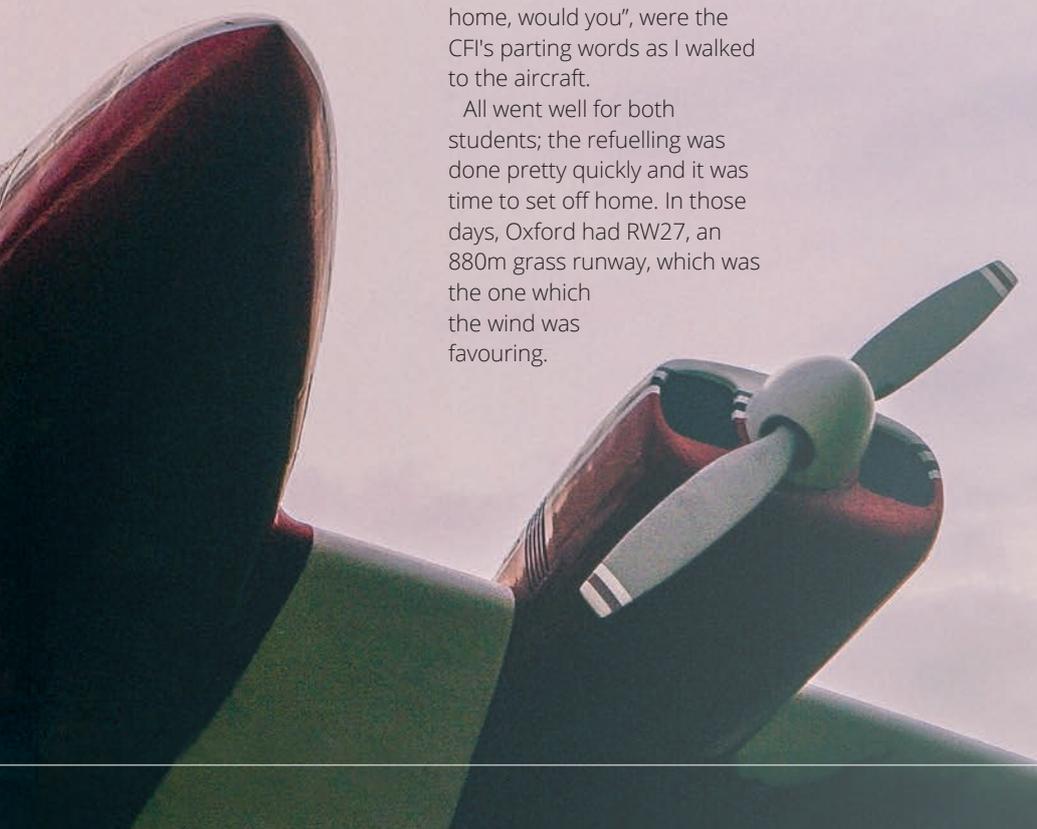
"I did recall that flying with three on board and 3/4 tanks had made one landing a bit firmer than I expected, but that was about all"

Blissfully unaware of the effect a hot day, full tanks and three adults would have, I summoned full noise from the mighty Lycoming and set off. Acceleration was somewhat pedestrian and we were still on the ground as we crossed RW 01/19, before eventually struggling into the sky. Querying this with the CFI when I got back, he said, "Oh, sorry – I thought you realised I meant 'tabs' fuel!". I'd no idea what that meant, until he showed me, so then I thought that I'd better look into the mass and balance and performance graphs before flying in limiting conditions again.

Which brings me to the point of this article. It is absolutely essential that pilots must be aware of not just the mass and balance limits of their aircraft, but also the take-off and landing performance values and how these are affected by wind, temperature, atmospheric pressure, aerodrome elevation, runway slope and runway surface. To which I would add the nature of terrain in the immediate vicinity of the aerodrome.

MASS AND BALANCE

Although you might find various 'apps' appearing on sale for working out the total mass and CG for your aircraft, the only definitive source is the graph published in the aeroplane POH. Be careful not to confuse metric, imperial and US units! You'll probably be sold fuel in litres, but will need to convert the volume into mass for the mass and balance calculation. There are a few gotchas to be had if you confuse density and specific gravity, particularly when using US gallons. Just remember that there are 3.7854 litres to a US gallon, which has a mass of approximately 6.0 lb when using 100LL. If you find that your total mass or CG would be outside the envelope shown in the POH,



it is essential that you take the necessary action to rectify the situation. Defuelling is not normally an easy option, so to avoid disappointed passengers, if your aeroplane is operated by others I recommend that you instigate a prudent refuelling policy within the group. For example, if your group owns a Cherokee 140 which hasn't been too laden down with extra toys, and at the end of the day you refuel to 'tab' level on one side and 'full' the other, you'll probably be just within mass and balance limits to fly it the next day with three PoB, assuming that they're no more than 80kg each and have no luggage. You won't notice any asymmetry, particularly if the third occupant sits on the 'tab' side. I read somewhere recently that a pilot on a CAA test had been refused the examiner's weight; not only was that inexcusable but it also put the candidate under unreasonable stress. Anyone who refuses to give you their weight when they're going flying in your aeroplane stays firmly on the ground, in my book, no matter who they might be! I recommend CAA Safety Sense Leaflet 09 for further reading on the topic of mass and balance.

PERFORMANCE

When I was learning to fly the VC10, as part of the course we had a fortnight of hell – graphs and exams being taught all about scheduled aircraft performance. Planning a flight from take-off to destination could involve a number of limiting factors; as well as the take-off distance available, the landing distance available and en-route obstacle clearance in the event of an engine failure all had to be considered too. For single-engined light aeroplanes things are rather simpler, but no less important. Usually it is the take-off distance available which is the limiting factor, but if you're intending to land somewhere on short, wet grass, you could

perhaps find that more limiting. Once again the POH is the bible to use and any 'app' you might be tempted to use will be unofficial unless the manufacturer has approved its use. The CAA has another excellent Safety Sense Leaflet on this topic, SSL 07C.

There are a few general points to be made when using the POH graphs. Firstly, make sure that the graph you're using is the correct one for the variant and configuration you intend to use. Not just flap setting and assumed technique, but also the type of propeller fitted. Some aeroplanes may have been fitted with coarse pitch 'cruise' propellers; not only will they probably not be the same as the type fitted when the POH graphs were originally drawn up, but they can also have a significantly deleterious effect on acceleration during take-off. Even if the propeller is of the same type, the condition of both engine and propeller may have deteriorated over the years. For this reason, the CAA advise the use of a 1.33 safety factor when calculating take-off distance required, once all other calculations have been completed. SSL 07C and probably also the aeroplane POH provide the factors to be applied for runway condition, elevation, and slope and atmospheric conditions to which pilots should always refer, rather than trying to commit them to memory.

TO FLAP OR NOT TO FLAP, THAT IS THE QUESTION

Not all POH include performance information for 'short field' take-off or landings. For example, nothing official has been published for take-off with flap for the Cherokee 140. Most of us know that use of some flap will reduce the take-off ground roll, but cannot quantify the actual benefit. My original brief when I first flew the Cherokee was to use 10° flap for take-off, but there was nothing in the POH when I was instructing to substantiate this.

"So down with one click of the flap before some gentle back pressure had me safely airborne, albeit slightly further down the field than I'd anticipated"

If you elect to use anything other than the criteria stated for the POH graphs, you're on your own!

HE GOT IT IN, BUT COULD I GET IT OUT?

Some years ago, one of our flying club members was conducting a solo PFL. When he tried his final engine response check, nothing happened. So he applied what he'd been taught and converted his PFL into a well-executed actual forced landing, then rang me to tell me what had happened. I drove to the site, to find the aeroplane sitting totally undamaged in the field he'd used. Although there was nothing immediately obvious to indicate the cause of the failure, we resisted the temptation to try and start the engine and went to find the farmer. A genial son of the soil, he told us that he and 'Pup', his rather impressive Rottweiler, would happily keep watch on the aeroplane whilst we decided what to do. After a check over by our LAEs, it was thought that there might have been an obstruction in the carburettor air intake filter, which they changed before running the engine and passing it fit in wind and limb.

So now came the question of getting the aircraft out of the field. Could we take-off, or would we have to recover it by truck with the wings off? Time was of the essence as the weather was due to turn nasty and the wind was forecast to back to an unfavourable direction. Nevertheless, after an hour or so spent poring over the POH and a chat with the met man, I'd calculated the take-off distance required for the expected conditions. Although the field had recently been mowed and had a beneficial downhill slope, at the far end it fell away into a small valley. It looked quite doable, so over we went to meet the farmer and 'Pup' before I paced out the take-off distance available. That was greater than

the calculated TODR, so I was soon taxiing to the very edge of the field before lining up for take-off.

Acceleration was entirely normal and I'd also remembered the rule of thumb of achieving 2/3 of the rotate speed by half the available distance, so was looking for 48mph by halfway. But the rattling and bouncing on the field surface made the ASI needle rather unsteady and the downhill section was rapidly approaching. So down with one click of flap before some gentle back pressure had me safely airborne, albeit slightly further down the field than I'd anticipated, and with a nagging flicker or two from the stall warning light. Which was something of a surprise as I'd been very careful with my calculations and the aircraft had a good engine and propeller, so why had it taken longer to become airborne than expected?

The probable answer came a week later. We received a

CAA Supplement advising that, for this particular model of Cherokee, the POH figures are 10% in error! Which is something else described in SSL 07C; when using the POH make sure that any CAA Change Sheets or Supplements have been included.

IN CONCLUSION

With the days beginning to get lighter again, at last, and the opportunities for touring hopefully increasing, it's worth reminding yourself about mass, balance and performance calculations, particularly when visiting an unfamiliar aerodrome.

There have been quite a few accidents caused by light aircraft either being overloaded or attempting to take-off from runways which weren't long enough. As the 'five p' saying goes (or six Ps sometimes): prior planning prevents poor performance, so spend a little time checking your figures and don't become an accident statistic! ■



ABOVE: A Cherokee, a great training aircraft for working everything out; A Vickers VC10, one of Nick's training aircraft



When using the POH ensure any CAA Change Sheets or Supplements have been included, as happened with Nick's Cherokee POH



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Product TMA44 and TMA45
Maker Trig

In the world of aviation there are few things more frustrating - and exhausting - than having terrible radio communications.

Edinburgh-based Trig Avionics solves this problem with their new audio panels, which have already started shipping.

If you're unaware of Trig, they are fairly new to the world of aviation, first founded in 2004 by Andy Davis, an entrepreneur and pilot. He set out to produce a solid state and energy efficient Mode S transponder to meet EASA's mandate for Mode S. At the time, aircraft owners had few options available, so Davis and his team changed this. Since then it has produced Mode S transponders and radios and now has a network of over 700 dealers.

Aircraft owners can select from two models, the superior TMA45 panel and standard TMA44 panel. Both units benefit from a high quality and simple to use interface, matched with impressive audio and entertainment technology. Trig audio panels are a

natural companion for Trig TY96 and TY96A stack radios; however, they also support third party products too.

Both audio panels are dual comm, dual nav and fully featured for IFR and VFR flight. The TMA45 has comprehensive entertainment features with Bluetooth wireless support for music and mobile devices. The TMA45 hosts 2-6 seats, and has Trig Digital Noise Reduction (TDNR) to automatically select the optimum level of intercom squelch and mic threshold, reducing cockpit noise. Trig Active Mute (TAM) further reduces unwanted background noise from radio static, producing class-leading audio. These features allow customers to enjoy the comprehensive stereo music and entertainment. The TMA44 hosts 2-4 seats and has mono entertainment and communication options.

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Jon Roper, Marketing Manager at Trig said, "With a choice of two audio panels Trig has created options for all pilots. Those looking for a fully-featured stereo and Bluetooth audio panel will fit the TMA45 superior panel. Those pilots wanting key features but great value will most likely buy our TMA44 standard panel."

The TMA45 is a plug and play retro-fit for GMA340 audio panels. The TMA44 uses an industry standard 44 pin connector, making a simple retro-fit with older audio panels easy. Both panels are 33mm high and have the same form factor.

You can order a TMA44 or TMA45 through Trig's extensive Approved Trig Dealer network. Trig products come with a two year warranty with global support. ■

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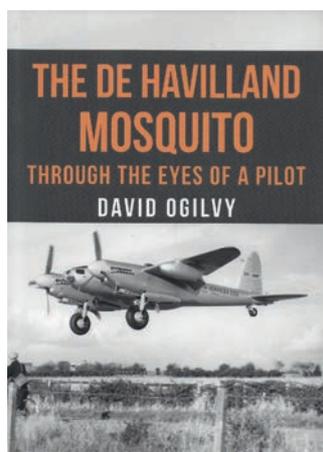
INSIGHT INTO THE HISTORIC MOSQUITO

AOPA Chairman George Done flicks through the latest book from David Ogilvy – a 'cockpit-eye-view' of one of de Havilland's most famous wartime aircraft

Book De Havilland Mosquito - through the eyes of a pilot
Author David Ogilvy

Author David Ogilvy is a well-known writer on aviation topics, and his flight reviews on now rare aircraft for this magazine (in its previous guise of General Aviation) have entertained AOPA members for many years. As one of the last surviving pilots to have flown Mosquitos in squadron service and later in a civilian capacity over a period of 15 years, this relatively slim volume comes as a valuable contribution to aviation history. The author writes with such an easy style, that once you start reading, it is hard to stop. I knew the Mosquito was an amazing aircraft, but I had no idea just *how* amazing until I'd finished this book.

The de Havilland DH 98 Mosquito was one of the fastest and most versatile aircraft of the Second World War. Two outstanding aspects of the aircraft were its ability for the design to be developed into a multitude of quite different operational roles, from fighter to long-range bomber to photo-reconnaissance, and the fact that the basic structure was largely made of wood (part of the recent exhibition at the Victoria and Albert Museum in London on



'Plywood: Material of the Modern World', was about the construction of the Mosquito fuselage). The book's first four chapters are devoted to the conception, development and construction of the Mosquito, as well as its operations and duties in the RAF, and civilian roles.

The chapter entitled 'As a Flying Machine' provides a first-hand account of the flying and handling qualities of the machine, with the misfortune of losing an engine at the wrong time being particularly revealing. An asymmetric safety speed of 184 knots on the heavy and powerful PR34 seems frightening!

The book ends with brief descriptions of aircraft that took over some of the Mosquito's roles, such as the Canberra and the Gloster Meteor.

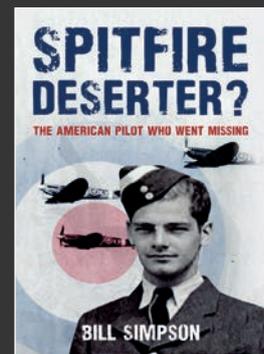
For me, it is a privilege to review a book written by my ab initio flying instructor of more years ago than I care to remember, but this is does not impinge on my recommendation that this book is an absolute must for your aviation bookshelf.

Ogilvy speaks from a place of authority as one of the last surviving pilots to have flown Mosquitos in squadron service and later in a civilian capacity. He flew the de Havilland classic intermittently over a period of fifteen years, and therefore provides an expert inside story of the secret development of the aircraft, the astonishing impact it made when first flown, its operational achievements, handling qualities and the many design developments that took it from quicksilver photographic reconnaissance aircraft to long-range bomber and pathfinder. ■

NEED TO KNOW

- ✦ Written from a position of authority..
- ✦ Provides insight into one of the lesser-known de Havillands.
- ✦ Captivating in-depth descriptions.
- ✦ More images would be useful.

Where www.amberley-books.com **Price** £14.99



ACCIDENT OR TREACHERY

Book Spitfire Deserter?
Author Bill Simpson

In April 1942, 47 Spitfire of 601 and 603 Squadrons of the Auxiliary Air Force launched from the USS Wasp, which had sailed to a position north of Algiers. The planes were bound for Malta. At the time, the island was under heavy siege by Axis forces. Salvatore Walcott's Spitfire never made it; he crash-landed in North Africa – part of Vichy France – and was interned. After attempting to escape, Walcott was liberated at the end of 1942. He returned to the UK and joined the US Army Air Corps. He continued to serve as a pilot until the end of the war and beyond, serving with the USAF during the Berlin Airlift.

But was that landing in Africa 'an inexplicable defection', as it has been described? Here is the evidence, alongside an exploration of American and British attitudes to men like Walcott who served under foreign flags. Walcott's story has been discussed for many years, but here is the truth.

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