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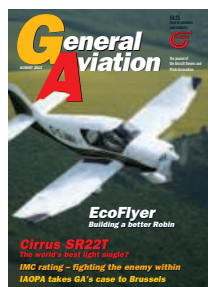
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Front cover:
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Flyer magazine

Chairman's message

Goodbye administrative tyranny?

The re-organisation of the CAA's activities with effect from 1st July in which the activities of Department of Airspace Policy and the Safety Regulation Group are merged was widely reported in the aviation press, including *General Aviation* for June - "CAA shuffles the pack". More detail is revealed in the interview of Mike Barnard, newly appointed GA Programme Manager at the CAA, reported elsewhere in these pages, with a look at how general aviation in the UK may or may not be affected. In this column I have tended to dwell on the problems emanating from EASA, but it is the National Aviation Authorities of the individual European countries regulated by EASA that interpret the EASA requirements and ensure ultimate compliance. Thus it is our own CAA that holds the responsibility of implementation in the UK, a mighty sword that can be wielded in a way that may either benefit or adversely affect the future viability of GA.

The CAA abides by a set of values that are, in short: integrity, respect, collaboration, clarity, learning and drive. Additionally, the CAA says on its website "...we are determined to use the values to create a work environment in which we respect colleagues and stakeholders, work together in a collaborative way and are focused on delivering our objectives in a way that demonstrates excellent value for money..." This is heart-warming stuff, and, indeed, AOPA's interaction over the past few years with the CAA has indicated a genuine desire to uphold the values as far as possible. But, nevertheless, once the detail of regulation implementation begins to emerge, these values tend to fade into the background, the ultimate one concerning value for money being the most susceptible. From the point of view of GA, this is aligned with proportionality, in other words, regulation should be no more rigorous or costly than the absolute minimum necessary to achieve the main purpose.

This means no "gold-plating" and the minimum of associated administration and form filling. In regard to this, the AOPA Instructor Committee has been much concerned about recent developments in the flight training industry. A pilot/owner member of AOPA who has recently done a renewal, revalidation or test flight with an instructor may well have had his or her ear bent by the massive increase in information required to fill in the appropriate CAA forms, including much that is redundant, since it is already on record elsewhere in the CAA data files. This apparently followed an internal exercise to reduce the total number of CAA forms, a laudable aim but leading to a worse result. Some IC members have had several meetings with CAA staff on this one issue alone and it is clear that the problem is understood and work to alleviate it is ongoing, leading to much more dependence on the use of entering data online.

The other major issue of greater current concern is in how the CAA will implement the EASA Acceptable Means of Compliance in relation to Approved Training Organisations (ATOs). The Registered Facilities (RFs), that, between them, produce maybe three quarters of newly licensed pilots in the UK and of which there are about 430 in the UK, a third being AOPA Corporate members, are likely to be affected to a much greater extent than the larger Flight Training Organisations (FTOs) who, for the most part, are better equipped and staffed to handle the requirements. The future viability of the RFs, many typically comprising one CFI/owner, two part-time instructors and two training aircraft, will be heavily dependent on the interpretation of the EASA requirements by the CAA. Clearly, these will need to be strictly proportionate bearing in mind the size and management of the average RF, otherwise the extra administrative burden may destroy the incentive of many previously viable small business enterprises to continue. It is hoped, following input from AOPA, that the CAA will grandfather RFs on their initial ATO application for a period of two years, which will allow time to introduce changes necessary to achieve compliance - an announcement is expected soon.

On a lighter note, the AOPA 'team' (Martin and I) entered the Royal Institute of Navigation Top Nav competition in the Piper Cub in which I have a share, achieving a podium finish by winning an award - more within these pages. AOPA supports the Royal Institute of Navigation in one of their aims of achieving higher standards of navigation and hence greater flight safety.



George Done

IMC: fighting a faceless enemy

UK Aviation Minister Simon Burns believes the IMC rating is not safety-critical and seems content to see Europe kill it off.

In response to an MP who passed on a constituent's concerns about the death of the IMC rating, the Minister has written a letter stating: "While the IMCR is a useful rating in the UK, it is by no means essential to ensure the safety of private pilots. If the holding of an IMCR were safety critical, the CAA would have made it compulsory."

To have this sort of tosh promulgated by an aviation minister, in the face of all advice to the contrary from the CAA and the industry, is deeply shocking, calling into question as it does the government's will and ability to influence this issue in Europe.

In fact, the Civil Aviation Department of the Board of Trade, forerunner of the CAA, did consider making the rating compulsory in the 1970s but was dissuaded because it would have dramatically increased the minimum number of hours and the cost required for a basic PPL, and the additional training was not justified when many aircraft had no instrument flying kit and not all pilots would want to, or be able to use the rating. It was decided instead to strongly encourage the uptake of the IMC rating, and to incentivise pilots the Civil Aviation Department allowed holders to fly with reduced visibility minima.

In the last 45 years some 26,000 pilots have paid for an IMC rating – a significant investment, with a minimum of 15 hours flying instruction – and the CAA has been able to find only one instance of an IMC-rated pilot being killed in actual IMC. The rating is deemed to be one of the major factors underpinning Britain's exceptional GA safety rate. More than 20 years ago, writing in the CAA publication *Horizon*, the then Chairman of the CAA Sir Malcolm Field said the CAA's research showed that general aviation in the UK was four times safer than elsewhere in Europe. An IAOPA-Europe survey found that while some 90 pilots are killed each year in France and around 80 in Germany, in Britain the figure is 20 to 25 for a similar level of activity. This is despite Britain's uniquely capricious weather – and weather is **the** big killer of GA pilots, as EASA has acknowledged.

AOPA Chief Executive Martin Robinson has written to the Minister saying his statement betrays a level of ignorance which AOPA finds unacceptable, and offering to meet him to set out the facts. He has received no reply.

Martin says: "This could be disastrous for GA. While the CAA is fully behind the retention of the IMC rating for all pilots on safety grounds, it is the Department for

Transport that negotiates with Europe on the issue. Unless the aviation minister and the Department for Transport is backing the IMC rating, there is no hope for it – and it seems the DfT's position is based not on knowledge and advice, but on ignorance and prejudice. In the name of all the pilots whose lives have been saved by the IMC rating, and all those who will die for the want of it, we call on the aviation minister to educate himself to the truth of the matter."

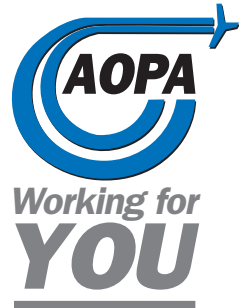
In common with all recent aviation ministers Mr Burns has little in-depth knowledge of aviation and less about general aviation, and is effectively the tool of his civil servants. In his letter to the Minister Martin accepts that his letter was written by a civil servant and adds: "The suggestion that the CAA would have made the IMCR compulsory is like saying the best way to reduce road traffic accidents would be to require all car drivers to have a PSV licence."

The letter would have been written by the civil servant who is advising the Minister on these issues. We cannot know who he is, what his motives are, and why he has adopted a stance that is so wildly at variance with that of the safety regulator and the GA industry. Martin says: "We can

engage with the CAA and with the Minister, but the vital man in the loop is an individual who is nameless, faceless and, it seems, profoundly misinformed. As far as the IMC rating is concerned, he is dripping poison in the Minister's ear. We cannot know what his motives are – perhaps an easy ride in Europe is more important to him than the lives of a few pilots – but ultimately the CAA must do what he says. Mr Burns must acquaint himself with the facts, and not have his name attached to fatuous nonsense like this."

Exchange of letters

Mr Burns was contacted by Don Foster, MP for Bath, who wrote expressing a constituent's concern about EASA's plans to kill off the IMC rating. In reply, the writer of the letter signed by Mr Burns rehearses the saga of EASA's changes to the IR, introduction of the en-route IR and the consultation process, which must give Mr Burns the impression that the killing off of the IMC rating was widely unopposed. It winds up by saying: "Safety conscious →



A briefing for the Minister

The February 2010 issue of *General Aviation* explained the IMC rating over 12 pages, six of which set out the personal testimony of pilots who owed their lives to the rating. You can read the lot online at <http://www.iaopa.eu/feb10.htm>. Here are some important points that are pertinent to the Minister's misinformed position:

- The CAA has been operating the rating for 45 years, during which time it has been audited at least 20 times by the International Civil Aviation Organisation, which has never expressed any concern.
- There is no credible suggestion that it is unsafe, and there is a mountain of evidence that it makes better pilots and has saved many lives.
- The IMC rating is supported by every major aviation organisation in Britain, from the British Air Line Pilots Association to the General Aviation Safety Council and the Guild of Air Pilots and Air Navigators.
- The Board of the UK Civil Aviation Authority recognises its safety value and is pledged to fight for its retention.
- The IMC rating is one of the significant factors contributing to the UK's high GA safety rate, which is far better than the rest of Europe.
- It is designed to save low-time pilots from the consequences of running into bad weather, a greater problem in the UK than in most of the rest of Europe because of our maritime climate.
- EASA never wanted to ban the IMC rating. It has worked to obtain a European consensus on it, but some countries don't agree. EASA cannot adopt it without the unanimous agreement of 27 states.
- The abolition of the rating is an unintended consequence of an administrative change. It is not a matter of standards or safety, it is a matter of bureaucratic tidiness. An administrative omission currently prevents the UK from offering the rating to British pilots in UK territory. A device must be created to allow this, and this must be arranged through the political process.

pilots can always undertake additional training to enable them to be able to cope with unintended flight into IMC."

Martin Robinson says: "Some pilots might find that patronising if it came from someone who knew what they were talking about, much less from someone who doesn't."

In his letter to Mr Burns, Martin writes:

"I appreciate that you did not write the letter but merely signed it but, in so doing, you take responsibility for its content. Whoever constructed the letter is clearly not well versed in the safety value of the IMCR which, for the last



While the IMCR is a useful rating in the UK, it is by no means essential to ensure the safety of private pilots. If the holding of an IMCR were safety critical the CAA would have made it compulsory. Safety conscious pilots can always undertake additional training to enable them to be able to cope with unintended flight into IMC. Those pilots who wish to undertake planned flights in IMC will have the option of obtaining a traditional IR, an EIR or a competency based IR.

forty years, has added significantly to the good safety record of UK GA.

"AOPA supports the proposals for a Competency Based IR and the EIR but these proposals do not replace the benefits associated with the IMCR. The statements in paragraph 7 betray a level of ignorance in respect of the UK flight training system which I find unacceptable. The suggestion that the CAA would have made the IMCR compulsory is like saying the best way to reduce road traffic

accidents would be to require all car drivers to have a PSV licence. "Furthermore, I

Chief executive's diary:

Free as air, and other oxymorons

We've had two major events since I last wrote this diary that show the regulatory authorities are taking more notice of general aviation than they have done in the past, at every level. In Brussels, a group of MEPs helped us stage the 'GA Connecting Europe' seminar at the European Parliament, while here in London the CAA staged a workshop on airspace, with particular emphasis on Class G and GA. These, together with the change from Patrick Goudou to Patrick Ky at the top of EASA, are causes for optimism, and together with the good weather which is giving our flying clubs and schools their first taste of encouraging cash flow for three years, brightens the outlook for our industry.

What's more, I'm sure you'll be filled with joy at the news that AOPA Chairman George Done and I ended up on the podium at the Royal Institute of Navigation's TopNav competition. The new format of TopNav is much more in tune with PPL VFR navigation, and I would recommend it to all members as a good exercise. It's also good fun, even if you don't win bragging rights. Ahem.

On May 21st I attended the industry-regulators strategic forum at Gatwick, where I was able to raise issues of concern around gold-plating of regulations, unnecessary red tape and the lack of a proper plan to manage the changes being faced by GA as the UK begins to implement new EASA rules covering pilot training and pilot licensing. Next day I had a meeting in

Cologne with Jules Kneepkens, EASA's Head of Rulemaking, along with my international colleague Dr Michael Erb from AOPA Germany. The main purpose was to further input the IAOPA issues that will in future be addressed in the EASA Safety Standards Sky Consultative Committee, which we hope will begin by reviewing existing issues around the new EASA rules and to bring them in line with the Principles and Guidelines recently adopted by the Management Board. Overall the meeting was extremely friendly, and I thank Mr Kneepkens for his time and that of his staff. I think we are finally on a new road with EASA.

On the 30th I was in Brussels for the EASA Advisory Body meeting, and from May 31st to June 2nd I attended Aero Expo at Sywell. It was great to meet AOPA members and to sign up 20 new AOPA members, and of course we were fortunate with the weather! We also launched the AOPA legal fees plan, free of charge to members, but you must register! The organisers of Expo did a great job and we thank them for their efforts.

From the 3rd to the 7th I was in the office catching up with emails and dealing with other issues. I met with Ray Elgy, the CAA's Head of Licensing and Training Standards, on the 7th to discuss issues appropriate to his brief, and between the 12th and the 17th I attended the EASA-FAA Aviation Safety Conference in Paris.



The main benefit of attending this meeting lies in the networking activities with key people in our industry across the world. There were 300 attendees with a much wider participation list from Brazil to Canada, Australia and New Zealand to Africa, Russia and India. Maybe this will be renamed the Global Aviation

Safety Conference or Airline Safety Conference because there was little in it for GA. The UAE speaker pointed out the difficulties that smaller states have in implementing new requirements like SMS, Safety Management Systems. Nicole Girard of Transport Canada stipulated that the rules making system should be based on 'over-planning and under-achieving'.

EASA and the FAA are averse to producing cost-benefit analysis as they believe that this requirement likely to hold back future safety improvements. Proving a positive cost-benefit, the FAA says, is difficult against a back drop of zero fatalities in CAT.

The EU/US BASA, the basic bilateral agreement on aviation, was discussed but not in any detail. Future common projects under the BASA include remotely piloted aircraft, and loss of control issues (for airlines only) and new technology. The BASA is being built on compliance checking and SMS, where every regulator has confidence in each other's system. Will this mean ICAO is of less, or more value in a global integrated aviation system?

On pilot licensing, the FAA said that they hope to be able to make a positive announcement next year. This relates to GA, because the GA PPL issue is the only

am surprised that a Minister of State does not know what the Safety Regulator's communicated position is with respect to the IMCR. The Board of the UK CAA has stated its desire to retain the IMCR for future generations of GA pilots. As the CAA is the Government's safety regulator, surely you should be following their advice?

In addition, what kind of safety system are we developing where the pilot can use the rating on a UK registered aircraft so long as it is not operating on a European Certificate of Airworthiness?"

"I would also like to point out that the USA have recently published an IMC Course, based on the UK Syllabus, in an attempt to reduce IMC related accidents. Even the Commission and EASA's Road Map talks about reducing loss of control in IMC conditions."

He concludes by offering to meet the Minister to discuss the issue. The letter was written on June 20th but no reply has been received at time of writing (July 17th). ■

History of the IMC

The IMC rating came about in 1967 because AOPA's Ron Campbell – author of many flight instruction books still in use today – believed that the vast majority of GA pilots needed enough basic skills to ensure their survival in bad weather. There had been a spate of accidents involving PPLs scud-running into masts, trees and hillsides. Ron Campbell told the AOPA Instructor Committee that most GA pilots would never attain an Instrument Rating and proposed the IMCR as a method by which they could save their own lives when the inevitable happened.

That situation remains the same today, even with EASA's competency-based IR.

In 1967 there was an outcry from professional aviation bodies and others who feared that an IMC rating would encourage the unqualified to launch into

conditions for which they did not have the skills. To their credit, the Civil Aviation Department of the Board of Trade backed Ron Campbell; it was difficult to argue that the IMC rating might be a danger to life when people were so obviously dying for the want of it. The syllabus was written by Ron Campbell and Peter Skinner (see obituary page 13) on a golfball typewriter at Ron's home near Guildford.

The Board of Trade's AIC setting out the thinking behind the IMC Rating, dated November 27, 1967, stated:

"Inexperienced pilots when attempting to exploit the capabilities of modern well-equipped aircraft have frequently run into trouble, sometimes with fatal results, in weather conditions that have imposed on them a task beyond their experience and training. A further consideration is that the Special VFR Clearance which permits →

licensing matter being discussed under the BASA. This will of course complicate the EU timetable on EASA FCL transition.

And there was a lot of talk of concern over the impact of automation on airline pilot handling skills, which has come about due to less manual flying. According to an Airbus test pilot, the only value of flying a GA aircraft for an ATP is the ability to experience G! As for training of professional pilots, emphasis was put on prevention rather than the cure.

With many of the world's main manufactures attending, particularly Boeing and Airbus, the requirement for global harmonisation through ICAO was the main message of the conference. Both the FAA and EASA are trying to influence the rest of the world. In Europe, EASA is setting the standards and taking them to ICAO, but sometimes being first has its downside – ETS is a good example, where Europe has come unstuck.

On the 17th I sat in on the AOPA Flying Instructor Committee, where again a number of concerns were raised with the ongoing changes. On the 19th I spoke at the European Parliament's seminar titled "GA Connecting Europe, which is well covered in these pages. Next day I went to the CAA's Finance Advisory Committee, where the main item for discussion was the reorganisation of the Safety Regulation Group into the Safety and Airspace regulation Group. On June 25th I attended the EC's Industry Consultation Body in Brussels. Key issues from this meeting were the Pilot Common Projects that form part of the SESAR deployment plan, and the fact that the Commission is planning to turn this into a regulation.

On June 26th I met with the new

President of AOPA Belgium in Antwerp. It's great news that AOPA Belgium is starting again under new leadership and a completely new group of board members. They will need at least a year before they have any funds, and I explained the need to pay the subscription to IAOPA HQ as well making a contribution to the European funds. I have promised 100% support from IAOPA Europe.

Next day I attended Patrick Ky's farewell function in Brussels as he prepares to step up to fill the shoes of Patrick Goudou as Executive Director of EASA. I also had a long discussion with Margus Rahuoja, the aviation advisor to EU transport commissioner Siim Kallas, about GA inside SES/SESAR.

On July 1st I had a pre-working group meeting with the CAA on the Electronic Conspicuity Working Group which I have agreed to chair. On the 3rd and 4th I attended an EGNOS meeting in Prague, where I gave a presentation on the benefits GA could derive from a better application of the EGNOS (SBAS – space based augmentation system) and from the improved GPS signal quality and improved accuracy. On the 8th I met with Cay Roth of Jeppesen to discuss our ongoing relationship, which has the aim of delivering, inter alia, iPad solutions for members who use iPads.

On the 9th I chaired the first meeting of the Working Group looking at Electronic Conspicuity. For a first meeting or orientation the discussion went well. Future meetings are likely to be more challenging. The aim of the Working Group is to examine the possibilities and benefits behind enabling VFR operators to be electronically visible in Class G airspace.

Are there ways in which VFR flights can become more inter-operable with other airspace users, thereby improving generally the safety of all operations in all classes of airspace. At this stage nothing is ruled in or out – we are not 'solutioneering'. Whilst we may only meet four times a year and probably for a maximum of two years as a working group, we will have tasks to complete in between meetings.

Can we improve safety across all our activities in Class G? Other working groups are considering issues like visual conspicuity and circuits and, I dare say, eventually there will be an ACEP task in time.

On the 10th I was at the CAA for two meetings – first, with my AOPA colleagues Nick Wilcock and David Scouller, discussing issues affecting the flight training community; the second meeting a follow-on discussion about the ATO requirements. On the 12th International AOPA General Secretary Craig Spence arrived from the USA to take part in the Future Airspace Strategy Workshop covered in detail elsewhere in these pages. The conference itself I found fascinating and very useful. Class G exists for the benefit of all users, and we must find ways to share it because if we don't, there's a risk that we will end up the losers. The challenge is to do this without changing the classification, or the entitlement of all users to fly in Class G, whatever their equipment. If CAT is to be denied access to Class G, then that may lead to more controlled airspace, which is the opposite of what we want. The CAA has shown itself willing to understand and protect our interests as far as possible, if we can work in partnership with them and others to improve safety.

Martin Robinson

→ private pilots to fly in Control Zones without complying with Instrument Flight Rules, is at present granted to a pilot irrespective of his own experience and piloting skill, and it is left to him to decide whether the weather will permit him to navigate safely. This has led to pilots getting into difficulties in areas of heavy traffic density.



“There will always be private pilots who wish to fly only in fine weather for recreation purposes, and for these, the existing qualifying standards for the licence are adequate. However, many pilots wish to use their more sophisticated aircraft mainly as a means of all-weather transport and it is evident that the standards for the private pilots licence do not provide adequate training for this kind of flying.

“Private pilot accident surveys have reflected these trends and co-ordinated efforts to improve matters by educational methods through the flying clubs and private pilots organisations have not been wholly successful.

“After detailed consultation with all interested parties, it was agreed that the time had come to introduce more direct measures to ensure the instrument flying competence of those private pilots who wished to fly in all weather conditions. By

improving the standards of a private pilot's instrument flying, the safety of his passengers would also be safeguarded as well as the safety of other users of the same airspace and people on the ground.

“It was considered that it might be too restrictive to require a full instrument rating for flights in IMC outside controlled airspace, but nonetheless it was agreed that pilots who undertook flights in IMC should be trained in instrument flying.”

The document outlined some of the factors that had been taken into account when deciding what measures should be introduced. The idea of a certain amount of compulsory instrument training in the PPL was rejected because it was discouraging to those who wished to fly only in fine weather. Pilots with PPLs would be restricted to flights under VFR and in conditions of reasonable visibility, and they would no longer be permitted to fly on an SVFR clearance in a Control Zone in IMC.

It goes on: “An instrument flying qualification (to be called the IMC Rating) would be introduced to supplement the basic licence, and it would confer on the holder the bad weather flying privileges not available to pilots holding only the basic licence.”

The IMC rating was enshrined in an amendment to the 1966 ANO and came

into force on January 1st 1968. The change to instrument flying requirements was phased over two years to allow time for instructors to be trained and for basic PPL holders to get their ratings.

At a meeting at CAA headquarters in January 2008, to which EASA's Eric Sivel and Daniel Hoeltgen came to outline the coming battle on the IMC Rating, the then head of the Personnel Licensing Department at the CAA, Ben Alcott, said that since 1968 some 25,000 IMC ratings had been achieved, and of the holders, some 23,000 pilots still had valid medicals. Around 10,000 holders were PPLs. In almost 40 years, he added, the CAA had been able to trace only one instance of an IMC rated pilot being involved in a fatal accident in IMC.

When Ron Campbell conceived the IMC rating, there were some 2,000 GA aircraft on the UK register, and they were becoming more sophisticated. Today there are 8,000, and it's worth reflecting what the accident figures might have been like had it not been for the IMC rating. As we move into the glass cockpit era, we are once again seeing aircraft become more sophisticated. With EASA and the EC saying inadvertent flight into IMC is one of their main concerns, the IMC rating has never been needed as much as it is today. ■



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Letters to the Editor

Saving the IMC

Sir,

Thanks for another great issue of 'General Aviation'. I am horrified to read the comments on the IMC rating and the other articles.

As a now very old retired pilot and AOPA member. When the IMC rating was first started we at the Norfolk & Norwich Aero Club were urged by our CFIs (all ex-RAF) to get the rating as not only would it improve our flying and safety as well as airmanship but would also be an additional safeguard for our families and friends who we flew. The famous Mosquito pilot Sqdn/Ldr Peter Mallender, who was our chief instrument flying instructor also used to keep a regular check on us.

In later years, when flying in the USA in a two man crew, it was a great help to ease the burden when flying in IMC for over four hours to help out the professional pilot – indeed I was delighted when he asked who taught me instrument flying !

To have this rating removed by bureaucrats who obviously no nothing about aviation just to 'standardise the rules in Europe' is really shocking, and I am certain it would be right to sue them and the government if lives are lost due to this stupidity.

David Hastings

Saving the IMC 2

Sir,

I am an instructor rated pilot and CPL who recently went on a round Britain flying trip with five friends in two aircraft at the end of June. We ran into some rather nasty and unexpected poor weather around the coast of Wales on Saturday 29th June and had to make a diversion into Caernarfon with both airplanes. One aircraft, a Robin, had a marginal IMC fit and was crewed by two IMC rated pilots. The other aircraft had a good IMC fit and was piloted by myself – I am IMC rated. I feel that this weather front turned into near ground level fog as quickly as anything I have ever experienced in 15 years. Fortunately both aircraft were able to recover in IMC after carrying out a 180 degree turn, returning the 20 miles to the nearest airfield. However, the weather was changing so rapidly that even previous VFR air behind us was now IMC. If it was not for the IMC training I wonder if we would have coped as well as we did. Would people carry out the training if there was no 'stamp' at the end of it? I doubt it. This was just another excellent example of why the IMCR is a life saver and should not be allowed to cease. I am pretty sure it saved some lives last week. Please keep up your good work representing the UK because other countries do not understand the weather we have here.

Tony Barber ■

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CAA: 'no more gold-plating'

The CAA has made an unprecedented apology for its poor performance on licensing during the EASA changeover and has promised "no more gold plating" for general aviation in the UK.

The 'mea culpa' was welcomed by AOPA as more evidence of the change of culture at the Authority, which is becoming more open and responsive to industry concerns. AOPA Chief Executive Martin Robinson says: "The old days of the CAA simply stonewalling an issue or refusing to accept responsibility for delay or error seem to be behind us, and this is to be welcomed if we are to form the sort of industry-regulator partnership that gets best results."

In its statement, the CAA said: "The introduction of the new European regulations for pilot licensing has resulted in a significant amount of change for UK pilots in the past year and has also impacted the Civil Aviation Authority's systems and processes. The result has been pilots and other stakeholders not receiving the level of service that we would hope to deliver. Today the CAA updated stakeholders on some of the latest licensing developments and also future improvements to the way the organisation works.

"Improvements to pilot licence processing:

"So far in 2013 the CAA has provided over 11,000 licences and ratings to pilots. But the systems and processes that we use to undertake this work are in need of significant updating and this is now starting to take place.

"A root and branch review of the licensing process has already started to deliver significant improvements that will continue over the next few months. These include:

- Setting up a central hub to handle transactions that is led by a new team providing a stronger focus on customer service and deploying resources more effectively
- Putting in place a tracking system for each transaction that allows us to actively pursue any item that has not been processed in the expected timescale and also allowing us to respond more quickly to customer queries

- Developing easier access to material and guidance on licensing issues, primarily through online factsheets
 - Undertaking a comprehensive review of queries and complaints to target improvements
 - Regularly retraining our teams on key EASA changes and implementing quality assurance checks on all our work
 - Working with stakeholders to capture their views and ideas on how to improve our systems
 - Making as many of our forms and transactions online as soon as possible.
- "Many of these improvements are already making a difference with the turnaround time for new licensing transactions now within our published code of practice target of 10 days, and in some cases down to five working days."

The statement also addresses the CAA's position on the IMC rating, saying: "We are still in discussion with the UK Government, the European Commission and EASA on the possibility of retaining the UK's Instrument Meteorological rating (IMCR) for new applicants post April 2014. It has already been agreed that pilots who hold the IMCR before that date may retain it on their European Part-FCL licences as a restricted Instrument Rating. We will continue to issue updates on the IMCR status as this work develops."

The CAA's statement also reflects industry concerns about EASA's new Aviation Training Organisation requirements, which impose new bureaucracy and cost on flying schools. Under 'Regulation of training organisations' the CAA says:

"The EU regulations also introduce increased oversight of flight training organisations carrying out training for private licences. As we are satisfied that these schools currently achieve acceptable safety standards we are working with the industry to introduce the new requirement with the minimum regulatory burden.

"We are still working on proposals but our initial thoughts on where costs for industry could be cut include:

- Delegating the oversight of the schools to a third party organisation, potentially an industry representative group
- Providing a free template manual for training schools to use. The manual is one of the key requirements for the approval, and a template will save organisations a considerable amount of time and reduce our oversight and costs
- Ensuring that we only use staff that are suitably qualified and experienced in the GA sector

"We will also seek to impose the minimum amount of regulations allowable, including the option to extend the frequency the schools are audited from every two to every three years.

"We aim to provide industry with our full proposals in July and will be running a series of road show events for organisations to find out more.

And finally, under the heading 'UK implementation of European regulations' the CAA promises 'no more gold-plating'. The statement says:

"As far as licensing policy is concerned, the CAA has also clarified how it will interpret existing national standards under EU regulations. The existing national standards documents provide guidance only and the CAA will not be imposing upon stakeholders any requirement to comply with material in these. We have committed to eliminate any 'gold-plating' of EU regulations, and will not impose any higher standards, or extra requirements than those required by the EU.

"The obligation is to meet the requirements in Part FCL and Part ORA. This can be achieved by following EASA's Acceptable Means of Compliance (AMC). Where these don't exist, guidance material from our existing standards documents can be used, supported by an equivalent safety case. In this case we will make a decision whether this should be proposed as alternative means of compliance and submitted to EASA.

"In the future we will re-publish the content of the standards documents as AMC and guidance material.

"As well as the improvements to our licensing role the CAA has committed to responding positively to the recent Government Red Tape challenge on general aviation. We will publish our full responses and proposed actions to the challenge in the coming months." ■



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Howarth wins ground on Popham wind farm

Could we be seeing government ministers taking to the skies to look at the way in which a giant wind farm is threatening Popham? During a debate on wind turbines in Parliament in June, Aldershot MP Sir Gerald Howarth MP, a private pilot, brought up the issue of the proposed Bullingdon Cross Wind Farm which will interfere with operations at the Basingstoke airfield. Housing Minister Mark Prisk MP responded that perhaps he, or the Secretary of State, should fly with Sir Gerald to look for themselves.

While Sir Gerald warmly welcomes the initiative, nothing further has been heard about flying – but his interjection did elicit a written reply from the Department of Communities and Local Government saying wind farms should NOT adversely affect airfields. What that means in practice remains to be seen.

During the debate the government promised to change guidelines on wind farms to make it more difficult for bureaucrats to over-rule democratic planning authorities and allow the construction of wind farms where there is strong local opposition. This has happened many times all over the country, allowing the establishment of wind farms on sensitive sites and bringing democratic procedures and renewable energy policies into disrepute.

Sir Gerald, who keeps a PA-28 at Farnborough, responded: “While I warmly welcome my hon. Friend’s statement, as I am sure most of my colleagues do, may I just point out to him that it contains no reference to general aviation and the Ministry of Defence, both of which have enormous concerns about the impact of wind farms? May I give just one example? As one of the few currently licensed aviators in this House, I was flying on Monday past Popham, in the constituency of my right hon. Friend the Member for North West Hampshire (Sir George Young), where there




Left: Sir Gerald Howarth MP puts pressure on government over wind farm threat

is a huge concern about 22 wind turbines, each the height of the London Eye, and the massive impact they can have on general aviation. May I ask the Minister to take into account those concerns, which are certainly shared by my hon. Friends the Members for Romsey and Southampton North (Caroline Nokes) and for Winchester (Steve Brine)?”

Mr Prisk, a Conservative MP for Hertford, replied: “My hon. Friend makes a very good point, and we do need to consider that issue, although of course what he is referring to is strictly outside the nature of this statement. Perhaps I, or indeed the Secretary of State, might like to take a flight with him to see this directly.”

But nothing has yet come of it – except for a response to a follow-up letter from Sir Gerald to the Department of Communities and Local Government on the subject of wind farm interference with aviation. The letter, signed by Mark Prisk, says: “The planning guidance we are working on gives a useful opportunity to consider what further advice we should provide on wind turbines and aviation. We have been in touch with the Civil Aviation Authority, the Ministry of Defence and the Department for Climate Change to seek their input... the overarching National Policy Statement for Energy, which forms part of the overall framework of national planning policy, sets out the approach we expect when energy projects could impact on civil and military aviation and defence interests.

“This makes it clear that the safety of UK aerodromes, airports and airspace should not be adversely affected by new energy infrastructure.” ■



2013 AGM

**2.00 p.m. Thursday 19th September 2013
at AOPA, 50a Cambridge Street,
London, SW1V 4QQ**

The formal notice follows:

**THE 47TH ANNUAL GENERAL MEETING
OF THE BRITISH LIGHT AVIATION CENTRE LIMITED**

Trading as
THE AIRCRAFT OWNERS AND PILOTS ASSOCIATION OF UK
will be held at AOPA, 50a Cambridge Street, London, SW1V 4QQ
on Thursday 19th September 2013 at 2.00 p.m.

Agenda

1. Apologies for absence
2. To confirm the Minutes from the 46th Annual General Meeting
3. To receive and approve the Directors' Report and Financial Statements for the year ended 31st March 2013.
4. The election of Directors to the Board of Management. The following Directors are due to retire by rotation: Mike Cross, Alan Croxford, George Done and David Ogilvy. Mike Cross, Alan Croxford, George Done and David Ogilvy offer themselves for re-election. The election of other properly nominated Members of AOPA.
5. To appoint as Auditors Messrs Waller & Byford, at a fee to be fixed by the Board of Management.
6. To conduct any other business which may properly be dealt with at an Annual General Meeting.

By Order of the Board **George Done, Chairman**




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Get September 14th in your diary!

AOPA's fourth annual Bonus Day – staged by popular acclaim after last year's audience unanimously requested a repeat – will be held on Saturday September 14th.



The Bonus Day gives pilots, whether AOPA members or not, a chance to find out from the experts what's happening at aviation's regulatory coalface, and the CAA's Deputy Director of Airspace Policy will be one of the main speakers. At a time when the future of GA's airspace is a hot topic, the opportunity to put your questions to him

should not be missed.

Douglas Cairns, a diabetic pilot who has influenced regulators to allow pilots with Type 1 diabetes to continue their commercial careers, will be vouchsafing the secrets of successful lobbying. AOPA's movers and shakers – Martin Robinson, George Done, Nick Wilcock and others – will be there to answer your personal questions about licensing, instruction, maintenance, EASA or any one of a hundred topics of concern to GA pilots. And AOPA's biennial awards to those who have worked hard in the interests of general aviation will be presented at the Bonus Day.

And of course, all this takes place at the Imperial War Museum Duxford, one of the greatest aircraft collections in the world. Your entry fee covers your catering – lunch is provided – your conference fees and entrance to the museum, while a special landing fee of £7 will be levied on the day.

The AOPA Bonus Day is an unmissable opportunity to network with fellow GA pilots and AOPA members, while enjoying a good day's flying and a discounted visit to a fabulous aircraft museum.



Once again we will have use of the superb AirSpace Hangar Conference Facilities, which are just a step away from the mezzanine viewing galleries overlooking the magnificent exhibits in the AirSpace hangar and with a fantastic view of the airfield. There will be free guided tours of the aircraft exhibition hangars

Tickets can only be purchased online. Tickets include admission to the presentations, tea and coffee on arrival, a buffet lunch and entry to the museum. An adult ticket is £25, and under-16s pay £18. Prices go up after September 9th. Discounted landing slots will be allocated on a first-come first-served basis, and the cost is £7. Charges are set to cover AOPA's costs on the day.

We look forward to seeing you at Duxford on Saturday September 14th. Book your ticket now on the AOPA website www.aopa.co.uk



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Death knell for Sheffield?



The Federation of Small Businesses has condemned the destruction of Sheffield City Airport as “an insult to the taxpayers who funded it”.

The airfield cost £18 million of public money to establish and was sold to a private company for £1. The government has now agreed to give a £1.8 million loan to the company to tear up the runway and establish a business park.

Neville Martin, Development Manager for the Federation of Small Businesses, says the destruction of Sheffield is a mistake and is calling on the government to withhold any further funding for the company that owns the airport.

The *Sheffield Star* has reported that the runway is set to be dug up by the end of the year following the Government’s agreement to the £1.8m loan.

Mr Martin says: “The long-expressed view of the FSB, supported by most Sheffield MPs and the majority of the business community, is that the authorities are at risk of making a big mistake in destroying a vital aviation link of the future.”

The same majority shareholder, Peel Holdings, effectively owns both Sheffield and Doncaster Robin Hood airport, the former RAF Finningley. Mr Martin says: “Robin Hood Airport is making massive losses, its passenger numbers are

dwindling year-by-year and are lower now than when it first opened. The only realistic expectation is impending closure. In the likely event this occurs, South Yorkshire will be without a commercial airport of any description and will therefore be at a distinct competitive disadvantage for evermore with other city regions.

“Sheffield City Airport represents an £18 million investment on the part of the taxpayer which was intended to help regenerate the local economy: an aim which seems to have been swept aside in order to establish a nest-egg for a corporate property developer.

“The current owners bought the asset for £1 and will use yet further public money – starting with the government’s £1.8million – to build a business park on the land. Their sole interest is to capitalise on their good fortune by building a portfolio of rental property at public expense. Their free acquisition of this asset has been paid for by the taxpayer whose mistaken belief was that they were buying a city airport. Such corporate opportunism is an insult to the taxpayers who funded it.

“The FSB is therefore now urgently calling upon HM Government to withhold any further funding towards the redevelopment of the site of the former Sheffield City Airport (including further destruction of its infrastructure) until an

independent public enquiry is held to look into the potential for its future use as a facility for commercial aviation.”

Mr Martin says that Robin Hood Airport is a failing undertaking and, in any case, does not serve the business community with flights to any European commercial centres. Sheffield on the other hand, is very close to the centre of a big conurbation and, in the right hands, could be highly successful. Some private organisations have expressed an interest in buying and running the airport but their approaches have been ignored by the site’s owners, and Sheffield already has underused business developments.

“Peel Airports came to Sheffield promising to run Sheffield City Airport alongside Robin Hood Airport – promise broken. Then to chop the runway in half for general aviation, building a business park on the remainder creating thousands of jobs – promise broken. Then to build a heliport with thousands of jobs on the remainder – promise broken. Then to build a business park including a planning application for a new DHL depot with thousands of jobs – promise broken, but sufficiently convincing to obtain planning permission for the airport runway to be dug up.

“The latest incarnation of the plan is the Blue Skies Business Park proposal, but this time using taxpayers money to dig up the runway. If the company cannot afford £1.8 million to prepare the site then how are we expected to believe they can build a business park, other than by using yet more public money?

“After being in South Yorkshire for over 10 years Peel has achieved nothing for Sheffield except a catalogue of broken promises. It has stripped assets from the region, the Sheffield economy has stood still whilst its competitors have moved forwards substantially.” ■

Obituary

Peter Skinner

1930 – 2013

Peter Skinner, a long-time fighter for general aviation through AOPA, died on 16 June at the age of 82. His deep-rooted determination to pursue a cause to the end produced some very worthwhile results; in particular, his activities with the National Air Traffic Management Advisory Committee helped to retain elements of airspace freedom that otherwise would have been lost. For several years I was AOPA’s joint representative on NATMAC with Peter, and I was able to see at first hand the time and energy that he devoted to the task. We all gained from that.

An even bigger input was Peter’s work in creation of the IMC Rating. He and Ron Campbell – then AOPA’s Executive Chairman – worked tirelessly, starting the

idea from scratch and building it to a level that made it acceptable to the CAA as a unique and nationally recognised qualification for holders of UK Private Pilots’ Licences. Without doubt this has saved lives and has been the envy of pilots in several other countries. The recent turmoil surrounding the fight for the IMCR’s future has been well publicised in this journal, but its origin has been less well known.

In earlier years Peter carried out his National Service in the RAF and then joined the RAFVR; however, this was at an unfortunate time of mass closures, starting with the reserve flying schools, leading to a short-lived move to the Fleet Air Arm Reserve and finally to the Army Air Corps, which was not under such threats. As a part of this last commitment Peter held a commission in the Royal Artillery.

When Peter’s formal involvement with the Services had finished, he maintained close contacts with the world of military aviation and, through effective persuasion,

he managed to enjoy a flight in a Gnat, an F-111 of the United States Air Force, and a low-level sortie in a Hawk from Valley. During this time, though, he was actively involved as a civilian flying instructor and spread his wings on a freelance basis to Leeds/Bradford, Derby (the original and long-lost Burnaston), Netherthorpe and the old Doncaster, for which he fought furiously. However, as applies to so many smaller aerodromes, all efforts failed to save it from closure. During much of this time he owned a pair of Cessna 150s that he rented to clubs and, for a short while, he had an Auster JIN Alpha.

Without doubt, Peter made a personal impact on many people and in many places associated with aviation. Yet this was not his main activity: he was Chairman of Peter Skinner Ltd, Sheffield-based importers of industrial raw materials, a very successful business now controlled by his son, Philip, to whom all of us at AOPA send our condolences.
David Ogilvy

Bringing home the bacon

AOPA Chairman **George Done** tells how he and the CEO won a certain award at TopNav



Above: in it to win it – Martin Robinson with the Cub G-ECUB
Left: in flight and heading for Reading – the view from the navigator's position
Below: G-ECUB on the wing, photographed by Martin A. O. Eames

AOPA supports the navigational competition TopNav organised by the General Aviation Navigation Group (GANG) of the Royal Institute of Navigation, both financially to a small extent, by publicising in General Aviation, and practically, by entering. The aims and objectives of the RIN include the furthering of the development of navigation in every sphere, obviously including aviation and the betterment of navigational skills. The



competition is now split between two venues, TopNav North at Gamston and TopNav South at White Waltham.

AOPA Chief Executive Martin Robinson and I have entered the TopNav competition at White Waltham every year bar one since 2003. We did manage to win an award in 2004 but since then we have been unsuccessful,



generally due to a stupid major navigational error such as plotting a waypoint wrongly, or getting the outbound heading 30 degrees out, as has happened.

GANG decided to change the format of the competition for 2013 and this enabled Martin and I to have a go in a different aeroplane, namely, the Piper Cub in which I have a share. The waypoints were provided at the start and there was no pressure, as previously, to plot the tracks on the charts within a limited time period, so no frenzied heads-down activity in the air by one of us. The route was also shorter than before and the number of waypoints fewer. The responsibility for navigation and flying the Cub could not be shared, as it had been in the Cherokee we used previously. Martin had the tracks plotted on his quarter mil chart and I also had these on my half mil, just for checking. The competition was judged on a number of factors, including planning (taking account of wind, etc) track keeping (competitors carried two GPS trackers), and overflight of and timing at waypoints. Amazingly enough, we learned we had won an award. Our delight was somewhat muted on discovering it was the AOPA award, but were reassured to learn that the identities of the aircraft and crew are not known to the judges, so that was just the way it turned out.

We both agreed afterwards that we enjoyed taking part in the event in its new format much more than before. We encourage pilots and owners to have a go next year – it's great fun! ■

Arrows infringement

A flying display by the Red Arrows had to be halted when a light aircraft entered the RA(T), forcing the display team to break off. The CAA is investigating the incident, at Silverstone before the British Grand Prix on June 30th.

With so many ways now available of getting Red Arrows information, it's difficult to understand why such infringements continue to occur. The Notams are available online at the push of a few buttons, and thanks to the work of AOPA's Mike Cross and others they're far less clunky and more accessible than they used to be. The RAT(S) are on the NATS website too. On top of that there's the Red Arrows freephone number, 0500 354802. Then we've got SkyDemon Light, a wonderful free service that gives you a graphical representation of restricted areas when you put your track on

the map. Short of having Red 10 come round your house and draw the RA(T) on the back of your hand, it's hard to see what more can be done. Yet still it happens!

The Silverstone infringement was a double whammy because as well as the Arrows RA(T) there was a separate restriction covering the Grand Prix itself.

Martin Robinson says: "Everybody should have the 0500 number in their phone, and call it before every flight, simple as that. If people did so, this problem would go away.

"SkyDemon, with backing from NATS, has gone to enormous lengths to create simple tools to help GA pilots avoid infringements, and SkyDemon Light is an excellent free system for keeping you out of trouble. If you haven't used it, have a look at www.skydemonlight.com right now and see how it does all the hard work for you.

"The root of the problem is that a small minority of unprofessional pilots take to the skies having done little or no pre-flight planning. When this turns out to be the case, we believe the CAA should throw the book at the culprits and if necessary, get them out of the air."

The CAA still gets around 800 reports of aircraft infringing RA(T)s, controlled airspace or Danger Areas every year.

Free grass field training



AOPA member Cornwall Flying Club is offering pilots free instruction in grass airfield operating techniques – always presuming they can fly in to Bodmin without too much difficulty.

The Club, whose longest runway is 610 metres, says it is finding that many pilots have either too much, or too little respect for relatively short grass runways, and it wants to help pilots amend either situation.

Terry Earl, a former Nimrod pilot with 20,000 hours and one of several highly-experienced instructors at Bodmin, says: “Even high-time pilots, if they’ve learned to fly at large airfields with big tarmac runways, can be trepidatious about using a grass strip, and some stay away from places like Bodmin unnecessarily because of perceived difficulties in landing and taking off. But there really is nothing to worry about, and these pilots

are diddling themselves out of a very good cup of tea in a uniquely beautiful part of the country.

“At the opposite extreme we get pilots who arrive in a PA-28 with four hefty chaps aboard, and they want to fill right up with fuel and take off again. We try to discourage this because of the cost of repairing the perimeter fence.

“But if pilots of either persuasion wish to come to Bodmin we will give them, gratis, an essential briefing on grass airfield techniques, and we will fly with them to show them how to get the most out of their aircraft on grass.

“It isn’t really necessary here – in fact, 610 metres is adequate for almost all GA aircraft and we commonly get planes like the Cirrus and the Aztec in. But pilots should know the effects of grass on their take-off distances, particularly if it has not recently been cut, and landing on wet grass also takes a little forethought.

“We will go through all the ramifications with anyone who wants to learn, and of course, it’s not only tea we offer – we have a full restaurant in the clubhouse and we’re a great base for touring the south west. Just call to arrange the briefing – PPR is required at any time.” ■

Annual General Meeting

The 47th Annual General Meeting of the British Light Aviation Centre Ltd, trading as the Aircraft Owners and Pilots Association of the UK, will be held on Thursday 19th September 2013 at AOPA, 50a Cambridge Street, London, SW1V 4QQ, commencing at 2.00 p.m. The formal announcement and agenda of the AGM appears on page 11.

A set of the financial accounts for the year ended 31st March 2013 will be provided in advance of the meeting on the AOPA website www.aopa.co.uk together with the minutes of the 46th AGM and brief personal details of the members offering themselves for election and re-election. These data will also be available at the AGM.

Any member wishing to elect another member to the Board of Management must provide notice in writing or email to the AOPA office at least 35 days in advance. A statement of willingness to serve will be expected from the proposed member together with appropriate personal details. Proxy voting is permitted, either by nominating in writing or by email a member who will be present at the AGM as proxy, or by nominating the Chairman as proxy.

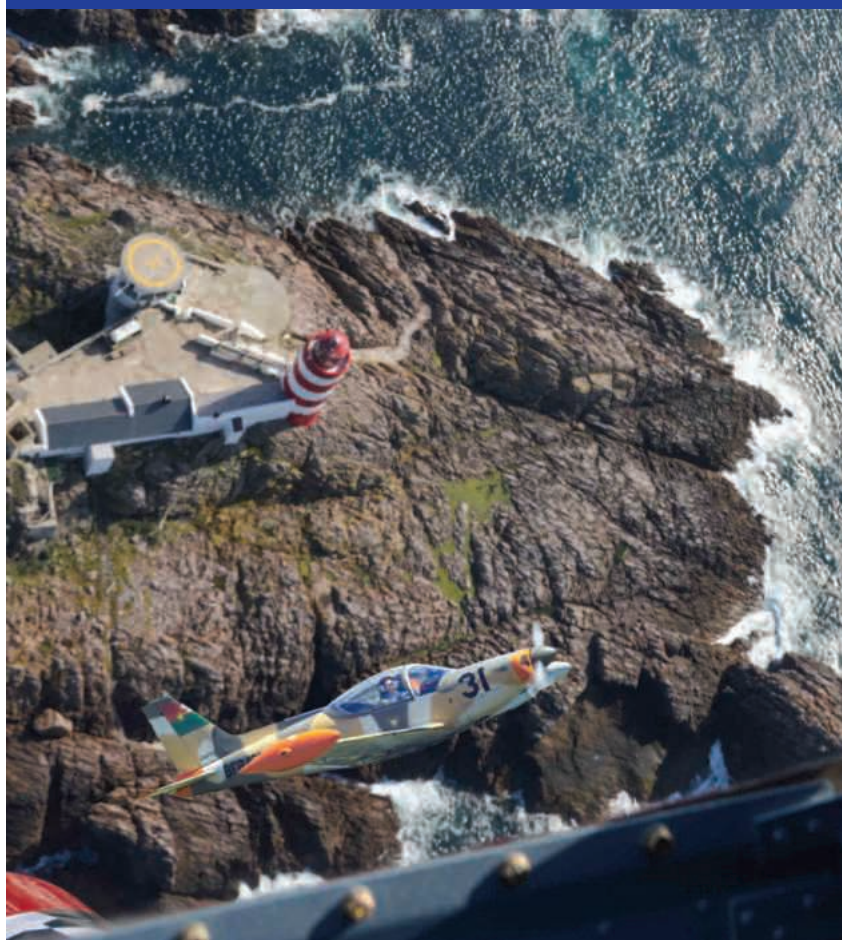
Following the formal business of the meeting, there will be time for informal reports from the Chairman and CEO and for general discussion.

Tea, coffee and sandwiches will be available for those attending from 1.00 p.m. and it is expected that the meeting will finish by 3.30 p.m. It is very *important* for planning purposes that members who intend to attend are requested to please let the AOPA office know in advance, either by telephone (020 7834 5631), email (info@aopa.co.uk), or by post to AOPA, 50a Cambridge Street, London SW1V 4QQ.

This could be you

Tried air racing yet?
Here’s AOPA Board
Member Geoffrey Boot

and his navigator – his wife Susie – turning around the Casquettes lighthouse on Alderney on the last lap of the Schneider Trophy Air Race last year. The picture was taken from fellow competitor John Kelsall’s RV-7. The next Schneider Air Race is the 100th anniversary and will be held on Alderney. New entrants are encouraged and to find out more at www.britishairracing.co.uk



Change in the air for GA

The CAA has appointed a general aviation insider to the post of General Aviation Programme Manager and given him the job of planning the future regulation of the sector.

Mike Barnard, pilot, engineer, aircraft owner, IMC holder, RV-6 builder and former Director of the LAA and GASCo has taken over from Giles Porter, who has been seconded to Botswana to assist the CAA there.

AOPA Chief Executive Martin Robinson welcomed Mike's appointment and said it gave him high hopes for positive change for

GA. "The fact that he is pushing on open doors inside the CAA, with a genuine mandate to make some pretty fundamental changes, is cause for great optimism," he said. "I very much welcome this appointment."

Mike has come to the job during a window of opportunity for general aviation to win for itself a regulatory structure which is proportionate, even if it means a fundamental change of approach from regulators in the UK and Europe.

"Across the board there is an appetite for change in the way GA is regulated," he said in an interview at the CAA offices in Gatwick. "There is a realisation that the sort of top-down regulation we have traditionally had does not work well for GA, and a new approach is needed. Both in the UK and Europe it is accepted that the current

regulatory environment is bureaucratically burdensome, and we are working with our European colleagues to deliver a safety strategy for general aviation, proportionate to the needs and viability of our sector. In other words, if the GA industry is to survive, it has to be allowed to breathe more freely."

As well as being proportionate, regulation has to be risk-based, Mike says – and it must be the result of all parties working together, rather than being imposed. "Bringing all the parties involved together, and working in both a European and national regulatory system to ensure that GA regulation is proportionate and increases safety levels, will be both rewarding and challenging," he says.

Mike has a background in mechanical engineering, initially with Rolls Royce in their then small engine division at Leavesden, where he participated in the development of the Gem turbine then being planned for the Lynx helicopter. He was lured away by the opportunities presented by the car industry, which outshone those of the rather constricting aero engine sector, and went to work for Ford at their research and development centre at Dunton in Essex. He worked for Ford in the UK and Germany, and later with Jaguar Land Rover – at that time a Ford asset – at Gaydon and Coventry, being involved in powertrain engineering and latterly car-line programme management. With almost 30 years of

Below: Mike Barnard, the CAA's new Aviation Programme Manager



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automotive industry under his belt, with solid experience of cross-cultural, multi-national programmes, the Gordian Knot of general aviation fazes him not one bit.

He learned to fly back in 1993 at Willow Air in Southend – he was then working for Ford and living in Essex. “For the first year I did the usual thing, flying all my friends and family, then one day I was caught out when broken cloud beneath me suddenly turned into unbroken cloud, and I managed to land rather shakily at Shoreham, got a taxi back to Southend and later booked up for an IMC rating at Cranfield.”

He added a night qualification, and he and his now wife Claudia – also an engineer and a pilot – bought a C172, defraying some of their costs by putting it on the Billins Air Services flightline at Cranfield. “We had it for two years before it was blown over in a gale, and we sank the insurance money into an RV-6A kit. While the RV project was going on we bought a Topsy Nipper, which we flew to the full extent of its capabilities – I even took it to the South of France.”

The RV build took eight years because of work commitments – Mike was doing a Masters at Loughborough at the same time – but when he was seconded to Jaguar Land Rover at Gaydon in 2001 he and Claudia were able to fulfil their ambition of having their own farm strip by buying a home with a few acres at Southam, north of Banbury. “I was Mr Bloke of Threadbare Aviation, but it was everything I wanted,” Mike says. He has taken the RV as far as Italy, and so far he has amassed almost 900 hours – he currently flies some 50 hours a year. After he took early retirement from Ford he accepted an invitation to join the Executive Committee of the LAA and, later, the Board of GASCo.

Announcing Mike’s appointment, in May this year CAA Chief Executive Andrew Haines said: “GA is an extremely important sector of UK civil aviation and Mike’s appointment is part of our commitment to work more closely with GA to ensure that our oversight is both appropriate and helping improve safety. Mike is obviously passionate about GA and this enthusiasm, coupled with his industry background, will help to ensure the success of the programme.”

Ensuring that regulation is risk-based is a major plank of Mike’s approach. His CAA does not propose to save you from yourself, unless you’re likely to take some innocent bystander with you. If you understand and accept the risks, you are entitled to take them.

Mike says: “The level of intervention, regulatory or not, is carefully mapped to the need to protect participants and third parties. Aviation regulators the world over recognise their principal duty of care to the genuine uninformed third-party – the man sitting in his garden, so to speak. We also recognise that as the degree of awareness of the risks involved increases, the regulatory approach to different participant may shift. For example, the pilot of a single seat de-regulated aircraft is fully aware of his own risks and is personally responsible for mitigating them; where the risk to society is small and the participants are fully aware of any risks involved, the level of intervention need not be onerous. We are looking carefully at the concept of ‘informed consent’ to help us develop more appropriate approaches to some operational aspects involved in GA; watch this space”

The CAA’s General Aviation Programme seeks to do three things – first, address key safety issues in the sector such as human factors, CFIT, infringements, loss of control, the usual suspects. Part of this process will be ‘de-gold-plating’, red tape removal, and the establishment of regulatory systems which use the lightest possible touch. Secondly, it will review regulations to look at whether that which is disallowed can sensibly be allowed – for

example, long-standing rules which had prevented overflight of urban areas by Annex II aircraft had persisted for years but were removed on the basis of safety data and careful risk analysis. A similar approach is well underway for other examples of operational limitations, particularly where the aircraft judged to be sufficiently capable and appropriately equipped. Thirdly, the CAA will continue to work our European colleagues in other NAAs, with EASA, and the European Commission to influence, develop and deliver a proportionate EU Safety Strategy.

“There’s never been a better time to make the changes that are needed,” Mike says. “In Europe and I believe globally, people are taking a new look at the regulation of GA, and there is an overwhelming desire for change. Regulations that were put in place, sometimes years ago, have been found wanting. Europe is struggling desperately from an economic standpoint, and the message to all regulators, not only those in the aviation sector, is to reflect on the wider economic impact of regulation. GA could be making a far greater contribution to the economy, employing more people, creating more wealth, paying more taxes, but it has to be allowed the freedom to breathe.”

Although Mike’s LAA background has equipped him well to understand ‘recreational’ flying and the regulation of the already (relatively) lightly regulated Annex II sector, he is also receptive to the needs of the traditional Group A aircraft and their pilots, upon whom the whole might of EASA regulation falls. But this is where a genuine partnership with organisations like AOPA will pay dividends. As I was walking out of Mike’s office, Martin Robinson was walking in. – *Pat Malone.* ■

Below: Mike built an RV-6A kit which he has flown to Italy





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Eyeball to eyeball with the Great White Sharks

'Change is on the way', GA is promised – but will it be enough, and will it come in time?

European Commission and EASA officials were given a rough ride by general aviation owners and pilots in front of MEPs at a unique seminar staged by International AOPA under the auspices of the Liberal Democrat group in the European Parliament in Brussels.

Matthew Baldwin, the EC's Director of Aviation, Filip Cornelis, Head of Aviation Safety at the Commission, and Jules Kneepkens, EASA's Head of Rulemaking, were among those who were made to feel profoundly uncomfortable as the finger of blame was pointed uncompromisingly at them for the parlous and declining state of the GA industry in Europe.

The seminar, called 'Connecting Europe through General Aviation', was facilitated by ALDE, the Alliance of Liberals and Democrats in Europe, and was

chaired by German MEP Gessine Meissner. Italian MEP Giommaria Uggias was also instrumental in setting up the meeting and made some positive opening remarks, primarily concerning his work on access to regional airports. IAOPA wishes to place on record its thanks to ALDE, Frau Meissner and Signor Uggias for facilitating the seminar, which had to be moved to a larger room in the Parliament to allow for the number of people who registered to attend. Also in attendance were Slovenian MEP Jelko Kacin and Italian Member Antonio Cancian, and we were joined later by German MEPs Silvana Koch-Mehrin and Holger Krahrmer.

Both Gessine Meissner and IAOPA Senior Vice President Martin Robinson stressed that the purpose of the seminar

was not to attack EASA or the European Commission, and while the frustration of the industry was evident, the discussion was never allowed to get personal. The senior EU officials present promised that 'change is on the way'. Whether it will be profound enough, or will come quickly enough, to save general aviation as we know it remains to be seen.

The question of why general aviation was such an economic and social powerhouse in the USA while barely being able to survive in Europe was explored, with the major part of the blame being laid at the door of European over-regulation. On occasion, the EC and EASA officials ducked behind the magic shield of 'safety', but it was pointed out that American GA is safer than European GA, and that EASA's belief that it cared more about pilots' safety than the pilots themselves was misplaced. "The crux of the whole problem is that EASA confuses regulation with safety," one delegate said.

Potential

In a keynote speech Craig Spence, Secretary General of IAOPA, set out the situation in the United States, where the general aviation industry serves more than 5,000 airports, compared with some 500

used by airlines, turns over \$150 billion, employs 1.2 million people, many of them in highly technical jobs, and carries some 170 million people a year, often between places that are relatively inaccessible. Of the 320,000 GA aircraft in the world, 231,000 are in the USA. "General aviation is an economic powerhouse in America, and a key component of the transport ecosystem," he said. The primary difference between the US and Europe, he said, was the regulatory system.

AOPA UK's Pat Malone, moderating the session, said it was possible to get a measure of how suppressed GA was in Europe by looking at data for the UK. While it had one-fifth of America's population, the UK's GA turnover was 100 times lower at £1.2 billion. Rather than employing 1.2 million people, the industry employed around 11,500 – again, 100 times less. Despite the mountains of so-called 'safety' regulation, accident rates in the US were similar to those in Europe, and in some cases better. While GA was growing rapidly in Asia, China, Brazil and elsewhere, in Europe it continued to shrink, fewer hours were being flown, and GA companies were going out of business. "Imagine how much potential there is in the general aviation industry, for jobs, for wealth creation, for tax revenue, for facilitating the free movement of people, if only we can lift the regulatory boot a little way off the industry's windpipe," he said.

Jacques Callies, President of AOPA France, gave some indication of the scale of the over-regulation problem when he announced the results of a survey in France which showed that 60 percent of the time spent on maintenance of a GA aircraft was

Top: Seminar panel – from left, Filip Cornelis, Head of Aviation Safety at the European Commission; Martin Robinson, Senior Vice President, IAOPA; Jacques Callies, President of AOPA France; Pat Malone, Moderator; Gessine Meissner MEP, Chairman; Giommaria Uggias MEP; Craig Spence, IAOPA Secretary General; and Matthew Baldwin, Director of Aviation at the EC



filling in forms and paperwork, and the cost of this was 30 percent of the total cost of maintenance. Bureaucratic complexity and its associated cost had become a major safety issue, he added.

Change on the way

For the European Commission, Matthew Baldwin made some conciliatory remarks, saying everyone agreed on the fundamental importance of the GA sector to Europe. "We recognise there is a perception problem," he said. "Collectively the GA industry feels that we in the EU are like a huge, insatiable regulatory white shark feeding on the industry..."

He was interrupted by cries of: "That's exactly what you are!"

But he went on: "Safety is paramount. That's not to mischaracterise your position – we are in agreement. And because of the economic downturn, the EASA system needs to be properly balanced. We need risk-based regulation, and we need to analyse accidents and incidents better, and learn from them." Mr Baldwin referred to the EASA Board of Management's endorsement of the paper produced by the French DGAC-led group which demanded a completely new GA strategy from EASA. "We intend to apply a risk-based approach to replace the rule thrown out for every conceivable risk," he said. "Prescriptive regulations have their limits. When pilots feel they are nonsensical or oppressive, they will be disregarded. Change is on the way, and we need you to participate with us."

Members of the audience were keen to question Mr Baldwin about some of his assertions – what safety issues were addressed by Part M, for instance, or by the ATO requirements, or 99 percent of EASA's silliest legalese? But questions were discouraged until the end of the session, by which time Mr Baldwin was no longer around to hear them – he had left for another engagement.

The Commission's aviation safety head Filip Cornelis stuck around longer. In the job since the turn of the year, he is clearly concerned at the level of mistrust and depreciation of EASA coming from industry. "A lot of it has landed on my desk since I took over the job last December," he said. "You make it clear to us that there is a strong sense of frustration in the industry. Now, the time has come to refine EASA's work, and this is in progress. We can't do it overnight, but there will be a number of clear principles, and a list of actions which will be updated every six months."

A new approach was being taken, he said. "In the new draft texts, certain things will be removed from the definition of



Above: Jules Kneepkens, EASA's Head of Rulemaking, watched proceedings from the audience but said little

'commercial' – cost-sharing will be allowed, parachute-dropping and introductory flights will be moved into the non-commercial sector. Maintenance programmes are under review, and there are new proposals for flight in IMC, with more proportionate requirements for GA. We are also beginning, at the technical level, to review the Basic Regulation."

He added: "I have to say, the messages we get from GA are not consistent – I have one organisation asking me precisely the opposite of what the others want."

This more than anything else should provide a clue to the fact that EASA's one-size-fits-all approach was a mistake; in particular, the Basic Regulation's requirement for a 'high uniform level of safety', which expects a two-seater operating from a grass field to attain the same performance as a corporate Gulfstream G IV, is misconceived. GA is a broad church which cannot be covered by

a single safety blanket. Mr Cornelis, at least, sat still for questions from the audience, many of which were expressions of frustration and bewilderment. One German pilot said: "Three times Mr Baldwin mentioned safety and security, yet what fears are they addressing? What risk has been identified?"

Given the nature of the criticism of EASA, the response of the Agency's Head of Rulemaking Jules Kneepkens, who sat in the audience, seemed rather lame. "Would you rather have 27 regulators or one?" he asked. The answers were vociferous. One incompetent regulator is no improvement over 27 that allowed GA to survive – and if EASA continues the way it's going there will be no GA left to regulate.

While he promised improved performance and asked general aviation to "talk to us", it was pointed out that the GA industry has talked to EASA incessantly for the best part of ten years and they hadn't taken a blind bit of notice. One of the seminar speaker invited by IAOPA, Flyer magazine publisher Ian Seager, drew applause from the audience when he detailed some of the regulatory disasters EASA had been →



Right: a section of the audience – more than 80 pilots and owners from a dozen countries signed up for the seminar



→ forewarned about, yet had persisted with. "Whomever was responsible for the Part M maintenance requirements should hang his head in shame," Mr Seager said to loud acclaim.

Is there hope?

Frau Meissner interceded to reiterate that the theme of the seminar should not be 'let's attack EASA', but she recognised that enormous frustrations have built up in the GA industry and major change is necessary to keep it alive. She spoke revisiting the Basic Regulation – one of IAOPA's most important goals – and a reduction of paperwork. "General aviation is very important to the internal market, and its regulation is

clearly seen as too burdensome," she said.

The European Committee of the Regions' *rapporteur* on airports, Roland Werner, introduced the second session of the day and gave the general aviation industry every encouragement to keep the pressure on EASA and the EC for a change of attitude. However, he too seemed to regard 'regulation' as a synonym for 'safety' and conflated the two in his remarks. Where regulation works against safety, there seems to be little understanding.



Above: German MEP Gessine Meissner, from Saxony, has taken up the cause of improved GA regulation

Will it make any difference? The horses came to the water, but we can't make them drink. Does the European Parliament have any meaningful control or influence over the EC and EASA? They have become so used to paying lip service to the idea of consultation that it would be easy to imagine them treating the seminar as a safety valve to allow the industry to let off steam, while continuing to stack ever more bureaucracy on our creaking backs. But they cannot now say they were not aware of the scale of the problem they are creating. Whether they have the ability to change in such a way that general aviation as we know it can be given a future in Europe remains to be seen.

GA – doing the business

While GA accounts for only five percent of the aviation industry's turnover, it serves more than 3,000 European airfields compared to only 420 which have an airline service, Dr Michael Erb, Managing Director of AOPA Germany, told the seminar.

"In Europe we have a similar geographical area to the United States, and we have a similar population with a broadly similar standard of living," he said. "We have the potential to build a general aviation industry which generates as much wealth and serves the transport needs of the people of Europe as well as GA does in America.

"We are not in the business of competing with the airlines. We are not about to fill up 200 Cessnas and fly them from Frankfurt to Paris to take business away from Lufthansa and Air France. But there is great potential for growth in the peripheral countries of Europe, where investment is most needed.

"The central part of Europe, from London through Paris and Frankfurt, is very well served by the airline industry and as a result, that's where investment is concentrated. But flying from one remote area to another in Europe is a completely different matter. Accessibility is economically vital, and only general aviation can make those remote places accessible, and encourage the investment they need."

Dr Erb mentioned also some of the problems that are unique to German GA. For instance, an airfield may be forced to close if there is no controller in the tower. This is like closing a motorway junction because there is no traffic policeman available. At Egelsbach airfield, where AOPA Germany is based, aircraft are subjected to noise restrictions which apply to no other traffic – a pilot may ride up on a moped or a Harley Davidson making as much noise as he pleases, but if he makes the same noise in his aeroplane, he is

breaking the law.

Current restrictions, and the cost of complying with them, have become a safety issue, Dr Erb said. "Safety is a matter of proficiency, and that means flying needs to be more affordable. We could also make flying safer with new, more reliable engines or traffic alert systems, but we cannot afford the certification costs for new GA equipment, or to buy them if they are certified. The safety needs of GA have been completely ignored in planning for SESAR, despite all our efforts. Instead, we are bound up with endless bureaucratic constructs like 'non-complex, non-commercial operations'. That's like describing a woman as 'non-male, other than a girl'. It may suit a bureaucracy, but in the real world it's just silly."

Small operator

Publisher Ian Seager described for MEPs his business use of general aviation. "Mine is a small company – in fact, it's at the small end of small, with 12 employees," he said. "I have a single-engined aircraft, a Cessna 182, which I run because I need to get in front of as many of my customers as possible. The easiest and most efficient way to do this is through general aviation.

"Of course, it doesn't work if I have a customer in Florida, but if used properly it can help grow your business. But I am beset by silly rules which make operating an aircraft more difficult and more expensive than it need be. Whomever is responsible for Part M should hang their heads in shame and run away."

Mr Seager said it was difficult to understand much of EASA's regulations, which were written by lawyers and made poor safety reference material for pilots. "I shouldn't have to read through 500 pages of dense legalese to find out what I am allowed to do," he said. "Recently I asked some regulators to explain a regulation, and the reply was: 'It will probably take a court case to establish what that means'.



Left: in Germany aircraft are subjected to noise restrictions which apply to no other traffic – a pilot may ride up on a Harley Davidson making as much noise as he pleases, but if he makes the same noise in his aeroplane, he is breaking the law

Regulations that have been written by EASA, supposedly for the safety guidance of pilots, are so opaque that a judge and jury will have to decide what they mean. Are we prepared to accept this?"

He echoed Jacques Callies' concerns about airport access, saying: "We need equitable access to airports, not regulatory-inspired monopolies offering mandatory

handling at usurious fees." And he concluded: "Doing business with general aviation in the United States is 150 times easier, and their safety record is better."

The bigger operator

Matthias Albrecht runs a software company that operates two Piaggio Avanti aircraft in the east of Germany. He became

a pilot himself and bought an aircraft in order to build his business by reaching clients all over Europe quickly and efficiently, and he has met with conspicuous success. He upgraded from a Mooney to a Seneca, then to a TBM 850 and finally to the twins.

"These planes are not rich boys toys, they are European aircraft creating jobs in →

Below: Second seminar panel, from left, Dr Michael Erb, Managing Director, AOPA Germany, Jan Brill, Moderator, Matthias Albrecht, twin operator, Gessine Meissner MEP, Chairman, Roland Werner, Committee of the Regions rapporteur on airports, Ian Seager, publisher, Flyer magazine



Towards a sustainable future?

Martin Robinson, Senior Vice President of IAOPA, warned that the regulatory burden is killing GA as we know it, and the collateral damage was severe. "Every time a pilot stops flying because of the increased burden of bureaucracy, someone in the supply chain loses a job – whether it be the man who services the aircraft, the flying instructor whose school goes bankrupt, or the lady who serves the tea in the canteen," he said.

"We're not here to kick the EC and EASA," he said. "There have been some success stories in aviation. At the Commercial Air Transport level, EASA is a success. For general aviation, however, it is not a success."

The European Commission, Martin went on, had identified seven priorities for a sustainable future for GA, namely:

- To improve statistics and obtain data on which realistic regulation can be based
- To clarify definitions in order to avoid different interpretations of regulations
- To ensure that regulation is proportionate to risk
- To permit better use of existing airspace and airports capacity to allow GA full use of the aviation infrastructure
- To facilitate access to global markets in order to increase European presence in these markets.
- To ensure environmental sustainability
- To encourage research and development in aeronautics.

"So they know what needs to be done," he added. But in 2009 the European Parliament's transport committee had brought forward 34 resolutions supporting the Commission's 'sustainable future for general aviation' agenda. "Five years on, we have none of the things the Parliament called for," Martin said. "Proportionality is still a pipe dream. There have never been any segmented impact assessments to show how regulations are working in practice. The Parliament's call for the gathering of adequate data on GA has not been answered. And its request that the EC report back on progress by the end of 2009 was

simply ignored. "This seems to be the measure of their interest," Martin said. "They are asked to report back by our democratically elected representatives, and they simply ignore the request.

"The system for promulgating regulations is undemocratic and flawed. The Commission and EASA do not use risk assessments comprehensively and consistently, so resources are not always targeted properly. There isn't enough trend analysis to allow risks to be determined. Once a trend has been established, the regulator should first look at what industry best practices are available before considering hard law. If it is considered that a new rule is required, then there should be a requirement for a cost-benefit study. The Agency should examine all the options available and present the options to industry as part of the process.

"The system today is one in which the Commission develops and implements a regulation, unsupported by regulatory impact assessments. I doubt very much that the Commission is aware of the impact that their regulations have on small and medium-sized enterprises in Europe. I am particularly concerned about the impact of the proposed regulations covering Approved Training Organisations. I have never seen a risk assessment to support the changes that are proposed, I have simply heard an EASA policy officer say that 'flying clubs have the ability to impact safety'. Our Registered Facilities have been conducting flight training safely, efficiently and to the very highest standards for decades. Yet the new ATO requirements represent somebody's idea of how to improve safety, without any evidence, any data, or any consideration for the ability of the regulated organisations to conform to the new demands upon them.

"As a pilot, I know that my safety is down to my desire to get home to see my family at the end of the flight. EASA's apparent belief that they have a greater regard for my safety than I do is misplaced. When they over-regulate, they damage and destroy people's livelihoods. The cost must be proportionate to the benefits, at every level."



Italy and they are used to drive business in Europe," he said. "I have 350 employees producing software for banks, and half my employees are in Saxony (in the former East Germany). There is no useful infrastructure there so when I have to put my eastern employees in front of my western customers, I use these aircraft.

More than 90 percent of the flights these aircraft make are taking my employees to my clients. If I did not have them, I would have to shut down an office and dump 150 employees.

"I am unable to do business efficiently in Berlin because of the difficulty of flying into the city in GA aircraft, Schoenefeld has only eight parking spaces for GA, all taken up by the locals, and the landing fee is €400. As a result, I have had to dump ten employees.

"I pay twice as much to fly as my competitors in the United States and I am prepared to do that because we can't compete without it. There are fuel taxes



Left: Piaggio operator Matthias Albrecht spoke of job losses at his company if his general aviation options were impinged upon

had an accident in 15 years of operation, yet now EASA says it has to make my employees safe from me. They are introducing a whole series of pointless and costly new requirements that will affect my

and ATC charges in Germany that my American competitors do not pay, which puts me at a disadvantage. We have never

operations. How many employees will my company, and many others like it, have to dump to afford this?"



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Right: Roland Werner, European Committee of the Regions' rapporteur on airports, urged GA to keep the pressure for change on EASA and the EC



The bureaucratic nightmare

Jacques Callies, President of AOPA France and publisher of the magazine *Aviation et Pilote*, told the seminar of a new survey of French aviation which had produced some interesting results. "GA in France flies more hours than the national airline and turns over €4.5 billion," he said. "But GA has been subjected to a one-size-fits-all attitude where airline rules have been imposed on GA. The negative impact of the paperwork has been staggering. Airlines can afford to hire people to handle all the new form-filling and box-ticking but the small and medium enterprises in the general aviation sector cannot, nor can they pass the costs on to paying customers - they must find the money themselves. Part M, for instance, may have provided useful safety guidance to airlines, but for GA there was no benefit whatsoever. The cost of filling in the paperwork is now 30 percent of the cost of

maintenance, and more than half of the maintenance organisation's time is taken up with paperwork and record-keeping. "None of this has anything to do with safety. We know this because it is our lives that are on the line. We need pragmatic rules, and there is no need to continually re-invent the wheel. We must simplify the bureaucratic nightmare that is slowly killing GA. We must address the fact that GA is effectively being excluded from regional airports by pricing devices. At Bordeaux, for instance, the GA pilot is charged €75 for a compulsory ride of 25 metres in a minibus. Elsewhere, landing fees have been increased by a factor of 15, and it is not unusual for a GA aircraft to be held for 30 minutes when they have a CAT movement arriving. Elsewhere in the world these things do not happen. Why do we in Europe have to do things in such a radically different way?"

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Keep looking out!

By Steve Slater

In the couple of months since I wrote the article "How Future-Proof Is Your Flying Site?" I have been amazed at the response it has generated. Thank you all for your comments and in particular, all those who have asked, how can I help?

Well, the simple answer is, as any good pilot does, keep a good look-out. Then if you see something conflicting, feel free to transmit; to info@gaac.org.uk and I will do my best to assist.

Whether it is a single wind turbine under the approach to a small farm strip, a much bigger windfarm backed by a multi-million pound corporation, or local authority eyeing the wide-open spaces of an airfield for new housing development to meet government guidelines, if we can find out about it in time, there is often quite a bit we can do. Most importantly, we can remind planning officers of the commitment to airfields laid down in Government planning policies such as the National Planning Policy Framework, or NPPF

We should also remember that for the most part, planning officers don't really know that much about aviation and airfields. In fact, many of them may only face an airfield planning issue once in their careers.

With one or two significant exceptions, where vested interests or attitudes intrude,

Right: Bourn is being evaluated as a possible site for 3,000 houses
Bottom right: climbouts from Wellesbourne are threatened by housing development

most planning officers are happy to receive advice and guidance. One of our main roles with AOPA and the General Aviation Awareness Council (GAAC) is to work with planners and policy-formers to get smaller flying sites in particular recognised as national and regional assets.

That work has led to comments being written into planning policy along the lines of:

"Local planning authorities should consider the role of small airports and airfields in serving business, recreational and emergency services needs".

"Local authorities should avoid development at or close to an airport or airfield which is incompatible with any existing or potential aviation operations."

"When planning for ports, airports and airfields that are not subject to a separate national policy statement, plans should consider their growth and role in serving business, leisure, training and emergency service needs. Plans should take account

of this Framework as well as the principles set out in the relevant national policy statements and the Government Framework for UK Aviation." (NPPF Para 33).

For over 25 years, the prime day-to-day point of contact for planning enquiries was David Ogilvy of AOPA. With David's retirement last year his work passed to the GAAC which works in partnership with AOPA. For some reason I, Steve Slater, didn't run away fast enough and found myself assisting on aerodrome planning matters.

Latest status

Over the past couple of months, I have handled around 30 different enquiries, ranging from advice on how to seek planning permission for a small microlight strip (there are some cracking 'Fact Sheets' on the GAAC website that can assist), to a number of longer-term issues.

You may recollect that in the last issue of *General Aviation*, I referred to a potential threat to Bourn Airfield in Lincolnshire, which is being evaluated by South Cambridgeshire Council as a potential site for a 3,000 house 'garden village'.

While the airfield operator, the Rural Flying Corps, is keeping a weather eye on developments, which have still to reach the consultation stage, it is notable that concerned local residents are already starting to run a 'Save Bourn Airfield' campaign. Not for the first time, the locals

have decided that the green spaces of the airfield is far preferable to the disruption, noise and inconvenience of a major building programme, followed by a giant housing estate.

A similar situation has also forced Welwyn and Hatfield Council to at least review its plans to allocate Panshanger Aerodrome as land for 700 houses in their core strategy document. As the terms of their lease agreement seems to have prevented the local flying club making any comment on the threat to the aerodrome, local residents kicked off a www.savepanshanger.co.uk campaign, which has prompted the Council to commission Atkins Limited to carry out a survey of the airfield's historical and other areas of value. As you can imagine both AOPA and GAAC have responded fully!

While not directly threatening the airfield's closure, we have also assisted in objecting to an inappropriate housing development just a few hundred yards from the threshold of the most used runway at Wellesbourne in Warwickshire. Initially developers had plans to build an estate of 99 houses stretching underneath the approach to runway 36, literally on the opposite side of the perimeter hedge.

As you can imagine, the consequences of a low approach or alternatively an engine failure on takeoff from runway 18 were pretty shocking. Our voice therefore joined many objections which led to the developers to review their plans. However even their scaled-back solution could still pose problems.

While the proposed houses are no longer directly under the approach and climbout,





Left: a major housing development has been mooted just west of Goodwood in Sussex

they are still in close proximity. Despite some advice now being written into the NPPF to protect operations from people moving in, then complaining about and trying to impose restriction, there is still a real concern that householders could generate complaints which might in future be laid at the door of the airfield, rather than the developers responsible for the inappropriate location of the properties in the first place.

Wellesbourne is not alone in this respect. Just a few miles away a small farm strip which has operated since the 1980s is under pressure from a housing development right next to its approach, there is also a possibility of housing development under the westerly approaches to Goodwood in Sussex, while up in Yorkshire a property developer has proposed that a large business and warehouse complex be built right next to

the threshold of Sherburn's runways 24/06 and 19/01. Like I say, keep a good lookout!

Tilting at windmills

As you will read elsewhere in these pages, among the many objectors to two giant wind farms (a total of 25 turbines, as high as the London Eye) threatening to restrict future flying from Popham, has been AOPA member Sir Gerald Howarth MP, who tabled a question in Parliament to further raise the profile of the campaign. First submissions have now been made to the three local planning authorities who must rule on the proposals – watch this space.

Our strict policy is that we do not object to wind turbines “just because they are there”. We only intervene when there is a demonstrable threat to airfield safety or safe GA flying and navigation.

Indeed sometimes we have assisted

developers in coming to a workable compromise with a strip owner, to fund a runway realignment, or to have shutdown periods when wind direction might initiate downwind turbulence. That way both flying and wind generation operations can go ahead.

In recent weeks a number of local planning officers have seen our point and either advised developers to withdraw their plans for amendment, or have refused planning permission. Given the money involved, it is not too surprising that developers are using paid aviation consultants too, either to ensure they properly plan their development, or in some cases to try to justify their development anyway.

Sometimes this advice is better than others. In one recent case in support of a large wind turbine just a few hundred metres from a small grass strip in the Midlands, the developer hired a consultant, highly qualified in the airline industry and airport management.

He duly suggested that the turbine location would be perfectly safe so long as the downwind leg of the circuit was flown at least 1.5 kilometres from the airfield. As any farm strip pilot will have already figured, this expert was clearly better acquainted with Heathrow, than hedgerow, flying! ■



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When I bought a Cirrus SR22 in 2007 I was convinced it was everything I'd ever need in an aeroplane. Nothing else had the speed, the comfort, the capability, the level of safety that the aircraft represented. I got an FAA IR solely in order to make full use of the plane's abilities. I sold it after almost two years, not because something better came along but because the dollar exchange rate shifted so dramatically that I found I could get all of my money back, and thus I'd effectively have had two years of free flying. By then, of course, the recession had taken hold and it was clearly a good time to husband your resources, so I didn't buy back in.

Flying the new Generation 5 SR22T – mine was Generation 3 – brings back to me just how much fun it was to fly the Cirrus. It's got to be the ultimate pilot's aeroplane, whether you're flying stick 'n' rudder down among the bushes or pushing buttons on the airways. Most companies will tell you they constantly improve and upgrade their product; with Cirrus, despite their own tribulations during the recession, it is certainly true. The fully-loaded 'Vision Inspired' version has everything that was on my wish-list during my last period of ownership. It also has a lot that I want that wasn't on my wish-list because I'd never

thought of it, and a lot more that I didn't want, but having experienced it, I want now!

Top of the list has got to be the load increase. With a whole list of strengthened and lightened items, and the new engine producing 315hp against the 310hp of my aircraft, the SR22T has an extra 200 lbs of useful load. This is not just nice to have; I used to have to pay close attention to weight and balance in mine, trading fuel for payload and constantly juggling the figures – if I had more than one other person on board I could only fill the tanks to the tabs. Now, the max gross is 3,600 lbs and it's a genuine full-load, full-fuel aircraft. The tanks take 92 US gallons (usable) and the range is excellent, even though the turbo and the extra weight will increase the fuel burn.

She now has Flight Into Known Icing (FIKI) capability, as opposed to my get-you-out-of-trouble de-icing system, and that was probably number two on my wish-list. European weather makes icing a nagging worry at any time of year, and the peace of mind FIKI represents is a huge bonus. The pump once failed on my weeping-wing system, and believe me that can change your mission profile for you.

It's profoundly dangerous to think of any aeroplane as uncrashable, but having tried

the Cirrus's new Electronic Stability Protection (ESP) system, you'd have to say the aeroplane could certainly dig you out of a lot of bad corners you'd got yourself into. If you're hand-flying and you unknowingly get into a graveyard spiral in IMC, once angle of bank reaches 45 degrees the ESP will bring it back to 30 degrees for you. If you're climbing at low power, ESP will reduce pitch to ensure the speed does not drop below 80 knots. More on these, and the fabled blue button, and the useful yaw damper – all things my Generation 3 Cirrus didn't have – when we fly the aeroplane.

There's loads more, too, so let me introduce it a bit at a time as we go through a flight. I flew the SR22T, registration N3600X, from Biggin Hill in the company of Cirrus's Adam Hahn, who'd taken it to Friedrichshafen and was touring Europe – he had tales to tell of one-stop flights from Poland to Spain at FL200 and 200 knots. Walking out to the plane I thought it looked a little different... in fact the undercarriage has been brought in by three feet for improved clearance. Visible changes include de-icing surfaces on the vertical stabiliser and the pitch horns, LED lighting, and larger, stronger flap hinges to cope with the increase of flap deployment speed from 119 knots to

Is this the best GA aircraft in

Former Cirrus owner Keith Hayley runs the rule over the new Generation 5 SR22T



150 knots – a significant help when you find you have to lose altitude quickly. The flaps also move out slightly, Fowler-like. One new trick I had to learn when originally upgrading to the Cirrus was to plan descents a long way out (there aren't any speed brakes) and that big jump in the flap limiting speed would have been welcome.

Most of the improvements are invisible from the outside – the one-piece carbon fibre wingspar has been beefed up to take the additional weight, for example, and the carbon fibre door is better. There used to be a trick to getting it to close perfectly; now you just click it shut like the door to your tool shed. Three seats across the back rather than two – well, seats for three kids, massive amounts of space for two adults. The sidestick's the same – the thing that hits you, though, is the Cirrus Perspective avionics panel. This is a bespoke version of the Garmin 1000, an avionics package enhanced with innumerable features you never knew you needed, like synthetic vision, night vision, dual air data computers, a keyboard interface and of course, the enhancements to the autopilot (a Garmin GFC700) which go to make up the ESP.

As usual, the panel is split into a Primary Flight Display (PDF) on the left

and a Multi Function Display (MFD) on the right. My aircraft had the Avidyne panel, and I have to say I found it more intuitive than the Garmin. I'm comfortable with Garmin protocols from other planes, and it wouldn't take long to get up to speed, I think. The biggest difference is the enormous amount of functionality and data available to the pilot through the Perspective layout. I'd fill this whole magazine trying to explain it all, but I came away with an overview of the important stuff, which I can share.

The PFD has the usual attitude indicator, ASI strip on the left and altitude strip on the right, with DI beneath. The synthetic vision gives you a terrain representation on the PFD, although rural Kent is not the place to show it at its best – not many jagged peaks around Biggin. You can carry lots of other data, like the engine condition information, in strips and panels on the PFD, although the MFD is usually the place for it. When you have your chart on the MFD you get a vertical representation on the bottom of the screen that shows not only the terrain, but winds at your level. When you get a traffic alert, up pops a diamond on your chart marking the position of the other aircraft, and when it gets close the diamond moves onto the PFD, turns into a yellow sun as proximity



the world?



**From the top: author Keith Hayley gets acquainted with the Vision Inspired Cirrus at Biggin Hill
Beefed-up flap hinges raising the deployment limiting speed to 150 knots
Vertical stabiliser leading edge and pitch horns get de-icing surfaces
Three seats across the back make Generation 5 Cirrus a genuine 5-seater**



increases, and finally turns bright red.

We cycled through some of the displays on the MFD. The fuel gauges, which were on the centre console in my Generation 3 Cirrus, are now digitally represented on the MFD and are far more accurate than your usual GA guessers. There's a 'nanny' page headed 'know your limits' that takes you through the IM SAFE checklist, gives you some tips on briefing passengers and asks you whether you've done your sums on density altitude, take-off distance, fuel burn and some other stuff. The liability lawyers may have put it in, who knows. The checklists come up here, and the approach plates, then there's the weather – which brings me to the 'Cirrus Global Connect' function. Not only can you download European weather in real time via the Iridium satellite system, you can make satphone calls and send text messages, too. I didn't know I wanted that, but I do. There's a stormscope option, and I'd have that as well. I'm not sure about the night vision camera; mounted under the left wing near the root, it delivers an NVG-type display to the MFD. Adam said he uses it every time he flies into an isolated airport at night – the kind of place where there's little or no artificial lighting around the airfield. It gives an excellent representation of what's on the ground, so if you had an engine failure you'd know whether to pull your parachute handle (or which more anon) or to deadstick it. It's also useful for taxiing in less well-lit areas and for seeing build-ups of clouds at night.

Below the MFD is the keypad for making those phone calls and sending texts, not to mention inputting flight plans and so forth... immediately below that are the autopilot buttons, including the blue button, with the vertical nav buttons on the right, then there's the audio panel, including a 'last message playback' function – push it twice and it replays the message before that, three times for the third-last message and so on. Further down is the oxygen switch and the simple three-stage flap selector – up, 50% and 100% – and on the console between the

Above: synthetic vision paints terrain on the PFD – but Kent is pretty flat

Above right: European weather can be downloaded via the Iridium satellite system

Right: Keith Hayley (left) gets ready to sample the Vision Inspired with Cirrus's Adam Hahn

Below: single power lever with go-round button on the left



seats is the power lever, fuel pump switch and two-place fuel selector. One further thing to mention – the air conditioning can be used on take-off, which mine couldn't, and that's a big plus. It takes about one percent of the engine's power, but there's so much power to spare now that they're happy for you to lose a bit on the aircon.

The engine is a turbocharged Continental TSIO-550-K making 315 hp, as opposed to the 310 hp of my Cirrus, still with the same single-lever control. It actually has a lower compression ratio than the older engine and has been tested on lower-octane avgas. Theoretically it's ready to take 94 unleaded, but there's more testing to be done before theory becomes practice. My Cirrus didn't have the turbo, an option I thought I could dispense with given the nature of my flying. In fact there was only one time during the two years I had her that it affected me, and that was when I had to make a small detour around one of the higher Pyrenees. The turbo loves life above 10,000 feet. If I lived in the Alps I'd go for it, but I live in Kent. The oxygen bottle is behind the baggage compartment, with a contents indicator under the keypad.

Another useful upgrade is the dual alternators – mine had one of 70 amps and a back-up of 20 amps, so you had to learn a sequence of shut-down items if one of them failed. Now, alternator 1 is 100 amps, alternator 2 is 70, and both are capable of taking the full load.

The ESP system can be switched off for training, but as an owner I'd leave it



Above left: engine status information selected on the Multi-Function Display
Above right: night vision system is useful on approach to low-light airfields
Left: control panel, with the fabled 'blue button' in the centre

switched on permanently. At extreme angles of bank it returns the plane to a reasonable position, and where an accelerated stall threatens in the climb, it pushes the nose down to keep you flying. Two extra bars appear on the attitude indicator to show you it's doing its stuff, and if you're approaching the stall you'll get an audio "airspeed" warning. Inattention and pilot overload can often combine to undo you on an approach to minimums, especially if you have to go round. The Cirrus now has a 'go-round' button on the power lever which pitches the nose up 7 degrees, the yaw damper keeping her in balance, and climbs her away to whatever hold is specified on the plate you've got on the MFD. (When I started flying, even 747s didn't have that sort of capability.) Here, the excellent yaw damper could be a lifesaver – could you guarantee to put enough boot in to counter the torque, with 315 horses under the bonnet? Even in the cruise the yaw damper does a far better job than the pilot could. Switch it off and you'll get a little bit of dutch roll to deal with.

The start-up is easy and the engine remarkably smooth – better than my Cirrus, I'd say. Noise levels are also slightly

lower – more like those in a car than in an aircraft. You could quite happily fly for extended periods with the headsets off. We taxied out to the hold for 21 at Biggin for power checks. I was very conscious of being rusty on the Cirrus and was trying hard to concentrate on what I was doing, but got no help at all from the Battle of Britain Memorial Flight, which conspired to ruin all my mnemonics by flying the Lancaster low and slow down the runway, then circling to land. It was Dambusters memorial day, May 17th, and a two-seat Spitfire and a Hurricane came and went while I was trying and failing to keep my mind on the job. And what a magnificent sight it was – particularly the Lancaster, which landed on 03 and turned to backtrack opposite our hold. We'd have got some better photographs, but the windows steamed up... I wonder why.

The parking brake's in a better position, easier to reach, and this is where you check that the arming pin is out of the parachute handle. The fuel data has been

moved from the PDF to the MFD, I notice; the mag check is the same, but you need to make sure you've got 150 degrees of oil temperature before you set off, because of the turbo. Check the battery (it's a 28 volt system), check the trim, ailerons neutral, autopilot off, everything in the green and it's time to go.

Rotate at 70 knots, take off around 77 – it needed a lot more rudder than I remembered – and I was quickly reminded of how fast things happen in the Cirrus. Best rate of climb is just over 100 knots, while 120 knots gives good visibility. The VSI showed 1400 fpm, and the TMA at Biggin starts at 2500 QNH, or 1900 feet above the aerodrome. Jet jockeys might be ready for any eventuality, but it would take time and practice on my part. Levelling off I got 170kt TAS at 81 percent power. We hacked around VFR over mid-Kent to look at the ESP, which provides what Cirrus calls 'envelope protection', keeping the aircraft within its normal flight parameters, however big a klutz the pilot is. And very impressive it is, too. I tightened a turn until bank angle exceeded 45 degrees and let go the sidestick; the ESP brought her smoothly back up to 30 degrees. I set up a climb with only 18 percent power and watched the rate, initially 1500 fpm, and the airspeed fall back until the audio



A short delay at the hold while the BBMF Lancaster clears the runway

started warning “airspeed, airspeed.” Then at 80 knots the ESP pushed the nose down and we maintained that speed, climbing at well above the stall. It’s worth mentioning that there’s no weight penalty for all of this – it’s just software working on the autopilot servos.

Engaging the autopilot, I was stuck by how much smoother it is than the one in my Generation 3 Cirrus. They’ve obviously done a lot of work on it – there was no chasing any parameter, she just rolled out where she was sent. I took her over to my own farm strip near Edenbridge to try an approach, set up for 95 knots at 25 percent power, then we wheeled back up towards Sevenoaks. I was hoping to show Adam Winston Churchill’s house near Westerham, but once again I’d forgotten how fast things happen in the Cirrus and we were past it before I realised. Next time, maybe.

We also played with the blue button. This is what you push when all else fails; you’ve got yourself in a mess, hopelessly disorientated in IMC or at night. Push the blue button and the Cirrus will automatically return to straight and level flight at reasonable cruising speed. We tried this from a variety of unusual attitudes, and it’s just a fantastic safety aid. My Cirrus must have been one of the last to be made without the blue ‘reset’ button, and it was definitely high on my wish list.

It’s not quite the button of last resort, of course; with the Cirrus, you’ve still got the parachute. Much has changed in the way they recommend you deploy the chute, if you have to, since 2007. The maximum deployment speed has gone way out to 140 knots, and instead of the multi-stage process of thinking about it and pulling it, the cover on the handle now had only two instructions: ‘remove,’ and ‘activate’. The parachute has been beefed up to take the heavier and more powerful aircraft, the rocket has also been given more muscle, but there’s no weight penalty because of savings elsewhere, such as the lighter nose gear and rear seat backs.

As we headed back to Biggin I remembered that Paris is only an hour



Above: finals for 21 at Biggin – trying a ‘soft field’ landing works wonders

Right: approach plates on the MFD link to the aircraft’s go-round button

Below: Vision Jet has similar layout to facilitate easy transition from the SR22T



away in the SR22 and thought briefly of going there instead, but I had things to do in the afternoon... but if you’d like to go somewhere, the Cirrus is what you need. What I’d forgotten was how hand-flyable it is – one tends to fly it on the buttons because it looks after itself so well. And having looked at the pictures, I notice that the layout of the SF50 Vision Jet is very similar to that of the Vision Inspired. Perhaps it would be easy to step out of one and into the other. Hold that thought. On short finals Adam gave me a few tips on good landings. “Treat it like a soft field

landing,” he said. “Carry in a little power until just before ground effect, then pull it to idle, hold it off the runway and touch down on the main wheels.” It works, too.

Conclusions? Well, the Cirrus has got to be the most capable single-engined aircraft available to GA, and a whole lot safer than anything else, single or twin. While the Cirrus can’t cover every eventuality for you, it turns potential problems into non-events before you ever have to do anything about them. When it first came out it was a game-changer; it filled a niche that few people knew existed. I thought then that it was as near as you could get to the perfect GA aeroplane, but I was wrong. I’d say this plane was perfect, but the R&D department in Duluth is probably working one something right now that would make me a liar.

Recession notwithstanding, Cirrus is taking more orders than at any time since I bought mine. They’ve done a lot of fleet deals, with the US, French, Chilean and Saudi militaries, and a big aviation university in China. The USA is coming out of recession, although Europe is struggling and Asia is slowing down. But you’ve got to believe it will come good. When it does, Cirrus will be ready with the best aircraft in the market. ■



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Solent puts out the welcome mat

Southampton seeks to shake off its GA-unfriendly reputation, as *Pat Malone* reports

It's no secret that Southampton Airport and the Solent Zone have not been on general aviation's Christmas present list for decades. The airport got rid of flying schools and private owners in the last century, and down the years Solent air traffic controllers have gained a reputation for being among the most obstructive and unhelpful in the country.

Whether or not that reputation was deserved – and from my personal experience it was well-earned – the winds of change have blown through Southampton and it is now possible to get a zone crossing pretty much for the asking. But having spent so many years fostering a bad name, Southampton and Solent are finding it difficult to shake off their reputation and they are putting out feelers to the general aviation community to try to improve their image.

It's not just a matter of public image, either – if GA pilots don't talk to Solent because of treatment they've experienced in the past, it can be a serious safety issue. Solent covers some very busy airspace, and aircraft squeezing around and under



Top: aircraft taking off on 20 turn left at 500 feet tracking down the Solent for noise abatement

Above: Solent is the second most infringed zone in the country. The zone is complicated, and in some areas there are no highly visible ground features

its territory can cause more problems than they would if they just knocked and were allowed in. So the people at Southampton want you to know that you're welcome, both to fly into the airport and cross the zone, and they invited AOPA to spend the day nosing about EGH1 in order to spread the word.

First, may I put that invitation to visit the



Above: the airport promotes its close proximity to a 66-minute rail link to central London
Right: planning officer Mike Glen with airport communications officer Joanne Quint on the apron

airport into perspective. The landing fee for a light single is £41.58 plus VAT, and there's also a minimum handling fee of £25.83 plus VAT. So that's £80, including the VAT. They talk of easy access to London – the railway station, right across the road from the terminal, can get you to central London in 66 minutes – so they're really thinking of the top end of the GA business. You need a PPR number and a high-vis jacket and you can't walk on the apron, you have to be transported. This is a grown-up airport pushing through 1.7 million passengers a year and taking aircraft up to the size of the 757-200. And when you look at the hoops they have to jump through – from the CAA, EASA, the Department for Transport, the Health and Safety Executive, NATS and other champions of the foot-thick manual – you have to accept they have very little room for manoeuvre.

Southampton is not completely helpless, of course... that handling fee is collected by the airport (if you need genuine handling, Signature does it) and they ought to be able to dispense with it. AOPA's campaign to make airports accept the European



Commission's direction that self-handling should be allowed in the case of GA continues. There is talk that Southampton is reconsidering both landing and handling charges – when we hear more, we'll pass it on.

Southampton's Planning and Policy Officer is Mike Glen, a GA pilot who learned to fly in Florida then cast around for a job in aviation – he's been with Southampton since 2009. He flies an AT-3 and a Warrior from Old Sarum and has 75 hours total time. He pays for his flying, and he knows what it costs. His responsibilities include dealing with the neighbours, particularly with regard to noise, and he has been conspicuously successful. In 2006 there

performing better than most regional airports. Before the recession, movements reached a peak of 58,000 and the airport handled almost two million passengers a year. Today, those numbers are around 43,000 and 1.7 million. While that looks bad, airports like Liverpool and Doncaster look on Southampton with envy.

Since the days when GA was effectively kicked out, the faces have changed, and today's managers are keen to shake off the baggage of the past. Mike Glen says: "We read the forums and look at the magazines and we know what pilots are saying. But we're trying hard to change the perceptions. We take part in the national ATC visit day, and more than 70 pilots have visited the

aggressively unfriendly, when in fact it's a statutory statement we are required to make for the avoidance of ambiguity."

Simon says ATC will make every effort to facilitate a crossing. "It's very rare for us to have to refuse access to the Class D," he says. "Sometimes we'll ask you to take up a different heading for a while, especially if you're routing north-south along the runway centreline, where you can conflict with IFR traffic using the airport for as much as ten minutes during the transit. East-west is much easier, and right over the airport is easiest of all."

Infringements – 15 during the month of May – tend to peak when GA comes out of its winter hibernation and pilots dust off



Left: NATS manager Colin Houston and senior controller Simon Davison in the tower

rusty skills. Mid-March to the end of May are the high points, and Simon goes to some lengths to brief local pilots who will be attending fly-ins near the zone boundary. One such event which attracted 90 aircraft caused not a single infringement. The hotspots, he says, are the north west of the zone where there is little room to squeeze between Middle Wallop and Solent, and the area just to the west of Southampton Water, where pilots following a Totton–Beaulieu track wander too far east. Again, even the slightest infringement can be a showstopper. Another factor is the increasing popularity of Lee on Solent, which many in general aviation fought hard to save and which is now attracting a lot of VFR traffic.

The RT loading on Solent can be high; it may be that you put in your 0011 squawk and listen out on 120.225, only to find you can hardly get a word in. According to Colin Houston, NATS' General Manager at Southampton, on the day before I visited Solent handled 55 into Southampton, 54 out, 13 from Bournemouth, 52 transits and 68 'basic service' calls around the zone. Quite often they can get 80 to 90 departures, the same number of arrivals, and 60 or more zone transits. It's not the stuff of Heathrow Tower, but it keeps them on their toes. If the frequency is overloaded, just keep listening out and they'll call if they need you. But if it's averagely busy, announce your presence and get a discrete squawk.

Solent has not been the aviator's delight in the past, but it genuinely seems now to want to repair its battered reputation for the benefit of all. There are people at the airport who understand GA as participants, and that can only be a good thing. There are persistent rumours of a reconsideration of Southampton's handling fees, but they may remain no more than that. It'll never again be the GA airfield it once was, but it might just be useful for your type of flying, and it's always good airmanship to talk to ATC in busy airspace. Let us know if they're as good as their word. ■

were 1,500 complaints of noise at the airport, while so far this year (writing in early June) there have been nine. Noise-abatement departures now see aircraft turning towards Southampton Water and climbing out of earshot as soon as possible.

The locals ought to be used to it because there's been an airfield on this site for more than 100 years. It had a military role in both World Wars, and of course the Spifire was designed and assembled here – R.J. Mitchell was a member of the Hampshire Aero Club, based at Southampton. A Naval air station during the Second World War – HMS Raven – it was owned by Southampton Corporation until it was bought by a private owner in the 1960s. It passed into the hands of the Ferrovial subsidiary BAA plc in 1990, and major investment was directed at turning it into a serious player in the regional airline world. General aviation, however, was badly treated. Private owners were given notice to quit, and flying schools were subjected to constant delays and excessive fees, to the point where some went out of business and others upped sticks and left. While the exponential growth in passenger traffic on which investment plans were based has not materialised, Southampton is

tower, and we've had flying club visits from Goodwood, Old Sarum and Compton Abbas."

One of the drivers behind Southampton's determination to do better by GA is the number of infringements of the zone. Solent is the most infringed zone in the country after Stansted. The zone is complicated, and in some areas there are no highly visible ground features. Even the most innocuous infringements, involving a light single dipping a wing into the zone, can cause chaos because the foot-thick manual commands that in such circumstances, no other traffic can be allowed within five miles horizontally and 5,000 feet vertically of the intruder. So that sanitises a huge block of sky, often including the airport itself.

Solent's defence mechanisms include the 0011 listening squawk it shares with Bournemouth, which it would like GA to make more use of. Even better, the tower says, get in touch on the radio, even if you're just going round, and get your own squawk. Senior air traffic controller Simon Davison is also a flying instructor at Lee on Solent. "Relations with GA have historically not been good," he says. "Even the fact that we have to say 'remain outside controlled airspace' on first contact sounds

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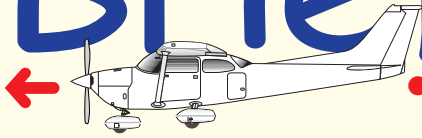
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Briefings



Commercial SE IFR gets French approval



The French DGAC has given charter operator VolDirect permission to conduct single-engine IFR commercial flights in a TBM 850 – this is the first time an air charter company has been given such approval.

VolDirect is now allowed to fly its TBM 850 in IMC anywhere in Europe, as long as the trip begins and ends in France, with the same passengers on the return leg. Daher-Socata, makers of the TBM 850, said the DGAC approval was the result of “combined efforts involving the operator, the aircraft manufacturer and the OSAC French civil aviation inspection authority

after VolDirect demonstrated a safety level equivalent or superior in all fields of operations and as mandatory to any airline in Europe.”

The approval is decades overdue. Aircraft such as the Cessna Caravan and the TBM, which have the Pratt & Whitney Canada PT6 engine, have proven far more safe and reliable than legacy twins which the authorities allow to carry paying passengers anywhere.

EASA is now said to be working on developing rules for this type of operation. Single-engine IFR commercial is already allowed in North America.

Formation flight training

Chiltern Classic Flight is offering formation flying training on the de Havilland Chipmunk. Working with former RAF fast jet and BBMF pilot Paul Shenton and ex-RAF instructor Simon Braithwaite, the RAF Bicester-based CCF is offering tuition in tight formation flying and “lead and follow” skills which is normally only the privilege of military and display pilots. This unique programme is available only to suitably qualified pilots. CCF, which obtained CAA registered training facility status last year, offers trial lessons, PPL and tailwheel differences training courses on the Chipmunk and plans to have a third Chippy operational by the end of the year.

You can get their details from www.thechilternclassicflight.com



GAPAN scholarships

The Guild of Air Pilots and Air Navigators has awarded four PPL scholarships, three instructor scholarships and five gliding scholarships for 2013. The average age of PPL and gliding scholarship recipients is under 19.



The PPL scholarships, which provide up to 45 hours of flying, attracted nearly 400 applicants for four places. Winners were 18-year-old Lewis Alderson, who lives in the north west of England and is training at Westair, based at Blackpool; Roger Cottee, 21, who is studying physics at Exeter and trains at Clacton Aero Club; James Johnston, 19, who is training at Cotswold Aero Club at Kemble; and James Mulvaney, 20, who is studying at the University of Southampton for a degree in Acoustic Engineering and is a member of the Southampton University Air Squadron. He will train Synergy Aviation at Fair Oaks.

The Flight Instructor Certificate (Fixed Wing) Scholarship award covers all direct training and examination costs, and this year fifty applications were received for the three scholarships. Winners are David Marshall, who will train for his Instructor Rating at Tayside Aviation, where he has already passed his PPL and CPL certificates; Paul Thomason, who teaches physics at a school on Shetland and will also train at Tayside; and Clare Tector, who in 2010 as a Shuttleworth Trust volunteer benefited from a de Havilland Moth Club flying bursary to convert onto vintage types and gain air display flying experience. She will train at Central Flight Training at Tatenhill.

There were more than sixty applicants for the five gliding scholarships. Winner Peter Amoo, at 16 the youngest scholarship winner this year, will train at Booker Gliding Club at High Wycombe; Helen Cooney, 18, an air cadet in Congleton who will take her course at London Gliding Club at Dunstable; Calum Galloway, 17, who will train at Lasham; Jordan Goodwin, 17, who will also train at Dunstable; and John Groves, 20, who will train with the Midland Gliding Club at Long Mynd.



Left: John Harrison receives his flight bag from Alina Davidson as Jenny Munro and Gary Merchant look on

John's career off the ground

The first Nick Davidson Memorial Flying Scholarship has been won by John Harrison, a 20-year-old ATC cadet from Horsham in West Sussex.

John has won a PPL course worth some £9,000, and was presented with a flight bag containing the syllabus, study books and equipment by Nick's wife Alina Davidson at a ceremony at Biggin Hill.

Nick Davidson, a British Airways A320 Captain, died of cancer last year at the age

of just 49, and the Memorial Flying Scholarship was created in his memory. Nick's first job as a professional pilot was as a flying instructor with the Surrey & Kent Flying Club at Biggin. John will do his PPL course at Surrey & Kent, with support from Biggin Hill Airport Ltd.

Over 40 applications were received for the scholarship, which is administered by Captain Gary Merchant, a close friend of Nick Davidson. "The judging process

proved to be a true challenge for me and my small team of advisors because the quality of the applications and the determination shown by the young applicants in the tests and at interview," he said. "After short-listing the top four for further practical flying tests, it became clear that John Harrison was the top candidate."

John is studying aeronautical engineering at Central Sussex College in Crawley and is in his second year of an Extended Diploma course for a BTEC at level 3. He has been a member of No 1015 (Horsham) squadron, Air Training Corps, since he was 17 and has completed Silver and Gold gliding awards at the Central Gliding School at RAF Syerston. John has joined 615 Volunteer Gliding Squadron at RAF Kenley as a Flight Staff Cadet and will become a civilian gliding instructor. He plans to join the Fleet Air Arm as a pilot once he has completed his college studies, and aims eventually to qualify as an airline pilot and with one of the majors.

Alina Davidson says she was been delighted with the response to the 2013 Memorial Scholarship and highly impressed with the commitment and dedication of all the applicants. "I am very pleased to continue the scholarship programme and to confirm that there will be a Nick Davidson Memorial Scholarship in 2014, and have asked Gary to find another worthy winner again next year," she said. ■

TV radar to help 5G sell-off

A radical new system for air traffic control radar using existing TV signals is being investigated by the government. Thales has been given funding by the Technology Strategy Board to research a system of 'multi-static primary surveillance radar' and is expected to complete a feasibility study within two years.

In essence the system uses the phenomenon whereby passing aircraft can produce ghost interference on older TVs, detecting and measuring it more accurately. The timing of the returns should allow the system to locate them precisely, while measuring the Doppler shift of the signal would also allow their speed and direction to be measured. Such systems are called 'bistatic' or 'multistatic' because they use different stations to send and receive the signals.

The driving force behind the change is the fact that if such a system were possible, it would allow the government to sell off spectrum currently used by air traffic control radar under its 5G plans.

The idea is not new. Robert Watson-Watt's first demonstration of the principle of radar in 1935 used the BBC shortwave transmitter at Daventry to detect a Heyford bomber at a distance of seven miles. The multistatic technique has had a renaissance with the arrival of powerful signal processing technology and cheap directional antennas.

Thales believes that the large number of TV transmitters means the system could provide a more reliable infrastructure than the current one, which typically relies on one radar per airport and which can be susceptible to confusing echoes and interference from the increasing number of wind farms in the UK.

Bonhams backs Woburn Moth rally

International auction house Bonhams has lent its support to one of the most popular heritage events on the summer calendar, the de Havilland Moth Club International Tiger Moth Rally at Woburn Abbey in Bedfordshire.

Bonhams, founded in 1793, is one of the world's largest auctioneers of fine art and antiques, including motor vehicles and vintage aircraft. In 2009 it sold the two-seat Mk IX Spitfire G-ILDA for a world record £1.74 million, and it recently sold G-AAMY, the DH60 Gipsy Moth biplane from the Oscar-winning film *Out of Africa*, for £171,000.

The rally runs on Saturday 17th and Sunday 18th August. Moths, Tiger Moths, other de Havilland types and invited vintage aircraft will operate from the specially prepared grass strip in the Deer Park at Woburn Abbey. One highlight for visitors will be a special 'get up close hour' each day, when enthusiasts can take photographs and chat to owners. There will also be club flying competitions on Saturday and an air display on Sunday afternoon. See www.mothsatwoburn.co.uk



New planes for Oxford

CAE Oxford Aviation Academy has taken delivery of the first of a 34-aircraft order of new Piper single and twin-engine trainers – the beginning of a wholesale “re-fleeting” exercise for the company. The aircraft, 22 Archers and 12 twins, will mostly be going to the Academy’s base in Phoenix, Arizona, but seven will be coming to Oxford.

The aircraft are the first *ab initio* trainers in the world to be factory-equipped with CAE-designed flight data analysis and cockpit video

systems which record data, audio and video and open up new debriefing possibilities.

Oxford Aviation Academy is the largest *ab initio* flight training network in the world with the capacity to train more than 2,000 students a year across 11 flight schools on five continents. Parent company CAE employs 8,000 people in 30 countries, offering services to military and civilian customers and training approximately 100,000 crewmembers annually.

National Aviation Heritage Register goes online

A unique register of historic aircraft in the UK has been updated and made available online by the British Aviation Preservation Council (BAPC), the umbrella organisation of UK aviation museums that look after the country’s historic aircraft.

Funded by an Arts Council England Subject Specialist Network grant, the updated National Aviation Heritage Register (NAHR) lists all aircraft held in museum collections across the country and grades them according to historical importance and condition. The grading not only identifies those aircraft that are of most importance in terms of a national aviation collection, but also those that are at most risk from issues such as deterioration, weather and financial sustainability.

BAPC Chairman Steve Hague says: “The NAHR allows anyone to identify historic aircraft in Britain, where they are, and their importance at the touch of a button. We have already included those aircraft not on public display and others with no registration or serial and are now in the process of adding the BAPC National Aero Engine Register to the content.

“The complete NAHR will help everyone to appreciate how rich and diverse Britain’s aviation heritage is and is an already important tool in BAPC’s strategy to preserve that heritage for future generations. We are very grateful to the Arts Council for supporting this work”.

The NAHR is available through the BAPC website www.bapc.org.uk.

Mitchell bomber returns to Dunsfold



Some 70 years after the North American B-25 Mitchell bomber first arrived at Dunsfold Aerodrome it will return for Wings & Wheels on Saturday 24th and Sunday 25th August thanks to the generous support of the Royal Netherlands Air Force Historic Flight.

Mitchells, with their then-innovative tricycle undercarriages, were based at Dunsfold from 1943 to 1946 and played an important role in the liberation of Europe.

Visitors to Wings & Wheels can also see the Red Arrows, Wildcat helicopter, Typhoon, Vulcan, Breitling wingwalkers and a host of modern and historic aircraft during five hours of flying displays. For more information visit www.wingsandwheels.net

New owner for Proptech

The Segers Group has acquired Proptech, the Portsmouth-based propeller repair and overhaul MRO, as part of a strategic initiative to develop its presence in Europe.

Proptech has been operating for over 40 years and is the largest aircraft propeller repair and overhaul business in Britain. The company services propellers from several manufacturers, from the fixed pitch for the general aviation market through to the six-blade composite type for regional operators. Current products include Hamilton Sundstrand, McCauley, Hartzell, Sensenich and MT propellers which are used on a variety of aircraft such as ATR 42/72s, ATPs, Jetstreams, Bombardier DHC8s, Dornier 328s, Twin Otters, F27s, CN235s, Beech 1900 and King Air series and Britten Norman Islanders.

Segers is an independently owned global group of companies that has been supporting civilian and military operators for over 30 years. Segers Aero Corporation, located in Fairhope, Alabama, USA is a Rolls-Royce Authorised Maintenance Center and holds FAA, EASA and other specific country approvals and quality awards. They provide maintenance for multiple products including the Rolls-Royce Allison T56/501D engine series and Lockheed Martin QEC, the Hamilton Sundstrand 54H60 propeller, T56/501D accessories and the Pratt & Whitney Canada PT6A and PT6T engines.

Segers has a linked network of facilities in the Middle East, UK, Singapore, Gibraltar and South Africa.

Segers Group Chairman Tom Cliff says: “Our acquisition of Proptech is an excellent fit for our current Group strategy in terms of product mix and geographical focus. The skills and experience of Proptech staff and management will complement the current Segers Group. There will certainly be many opportunities for growth in areas such as cross training, joint sales and marketing initiatives and capability development.”

The transaction is expected to close by the end of September.

Fifth Texel Fly-in

More than 300 aircraft are expected at the Fifth Annual Texel Fly-in on September 6th, 7th and 8th at Texel International Airport in the Netherlands.

AOPA Netherlands, the Dutch Association of Amateur Aircraft builders and the Royal Dutch Aeronautical Association are jointly behind the event, which promises to be one of the largest GA events in Europe.



In 2012 more than 200 aircraft flew in from England, Belgium, Germany and France. It is common to bring your own food and drinks and share it with fellow pilots, and it is possible to camp under the plane.

Ed de Bruijn, Director of Texel International Airport, says: "We are very pleased that the largest fly-in in the Netherlands is coming back to our airport. In particular, the co-

operation between the various aviation organisations makes it such a great event. Whether you are pilot or aviation enthusiast, it is not to be missed."

Interested pilots and enthusiasts can register at <http://www.flyin.nl/>



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Cock of the walk

Can Robin's EcoFlyer match the durable appeal of the DR400?
Pat Malone puts it to the test



Flyer magazine

The problem with Robin is that it's just too good. The Robin DR400, that is... a fabulous little aircraft, in many ways unchanged since Pierre Robin first put saw to Oregon pine back in 1972. But you cannot survive in the modern world without ceaseless innovation, and when your product is as good as the DR400 you need innovations of an inspired nature just to stay in the game.

If you have a successful product line and you change it, it had better be better. And down the years, Robin's other offerings have not necessarily been better. In fact, of the 3,500 aircraft the company has made in its lifetime, 3,000 have been DR400s – fewer than 500 of all the other Robin types put together, 20 in total, have been sold. That includes the Aiglon, the ATL, the 300s, the HR100, 200, R2000, R3000, DR500 and all their derivatives. They've tried two-seaters, V-tails, composites, all-metal aircraft, smaller aircraft, bigger aircraft, and nothing has really hit the spot.

Above: Robin EcoFlyer – more than 60 sold, and in line to become one of the company's success stories

Below: Robin have tried V-tails as on the ATL, and all metal aircraft like the R3000

All these types put together have shifted one aircraft between them for every six DR400s sold.

At the same time, Robin Aircraft has gone through a bewildering series of



changes of ownership, or at least changes to the holders of the rights to produce aircraft – so many, in fact that it's quite astounding that the company is still in business today, still manufacturing aircraft, and yes, still innovating. It has survived because it has the DR400 to fall back on, and even in a recession, the DR400 finds a market.

You don't have to fly the 400 for long to discover why owners love them. There's the 130 knot-plus cruise on the 180 hp engine, 32 litres an hour consumption, the comfort, the payload, the fabulous, almost helicopter-like visibility, the relatively inexpensive maintenance. The 400 is very easy to fly – that cranked wing with the leading edge cut back towards the tip really does give the aircraft a level of aerodynamic stability that few others can match. In the past year I have flown the DR400-180 Regent across Europe to the Turkey-Armenia border, and across the Sahara to Niger and back, and my respect



Above: Guy Pellissier and Daniel Triques, principals of Robin New Aircraft, with the EcoFlyer
Right: no avgas here – the EcoFlyer's main tank filler is placarded for JetA1
Far right: weight shift – Robin makes much of the carrying capacity of the EcoFlyer



than its avgas sister. The few cost disadvantages seem to be heavily outweighed by the improvements. It is finding a market, even in the depths of this recession, with some 60 sold to date. Time will tell, but it looks on the face of it to be one of Robin's winners.

Avgas issues

From a fuel standpoint, I'm more sanguine about the future of avgas than I was a couple of years ago, at least in the developed world. But having flown in Africa I'm more conscious of the fuel's geographical limitations; in many parts of the world avgas is simply non-existent, while avtur is readily stocked for commercial flights. The cost of shipping barrels of avgas into remote places is prohibitive, and even without the cost advantage, if you ever intend to fly beyond Europe the EcoFlyer should

for the aircraft is immense. If you were upgrading, the next step would have to be a very serious investment, two or three times the cost of the Robin, with variable this and disappearing that, and all the cost implications they represent.

So perhaps you should consider the latest DR400, the EcoFlyer. Built like the 400, looks like the 400, flies like the 400... but here's a figure to conjure with. It costs me £228 to fill the main tank of the Lycoming-engined DR400, and if I fly high and lean off well I can spin that out to three and three quarter hours. Filling the same tank on the EcoFlyer would cost me about £88 and at similar power settings it would last five and a half hours.

It is of course equipped with the diesel-cycle Centurion engine, which comes in 135hp and 155hp versions, the larger of which boosts the aircraft's MTOW to 1,100kg. It's less noisy than its avgas counterpart, and with the three-bladed prop and silencer it's quiet enough to operate over some of these German villages where you can't go between noon and 2pm or whatever. It costs a bit more to buy and maintain, but the company reckons that the fuel saving over the lifetime of the engine life dwarfs the additional parts and labour costs.

Having flown the EcoFlyer 2.0S in glider-tug configuration, I'd have to say it gives you an easier ride even than the DR400. It's easier to start, easier to operate, and even more stable in flight



Above: two big air ducts cool the turbo (left side) and the cylinders equally
Right: by contrast, the Lycoming takes up relatively little room under the cowling
Below: silencer can allow the EcoFlyer to go anywhere, even in Germany



enter your thoughts.

The history of the Robin's diesel-cycle engine has been fraught. It began life, of course, as the Thielert, a heavily re-engineered version of a Mercedes car engine, redesigned even to the extent of using an aluminium block. While its maintenance intervals were short, Frank Thielert said it would eventually go to a 2000-hour TBO, and in the meantime he contracted to do the 300 and 600-hour work free of charge under warranty, which shook out the most worrying costs and attracted a few buyers. Thielert's insolvency invalidated the warranty, landing owners with some heavy bills.

Under Germany's unique insolvency laws Thielert has been run for five years by the administrator and its future is as assured as any engine manufacturer. It has sold about 4,000 engines; Diamond used a lot of them in the DA-40 and DA-42 until they started making their own, and others have been retrofitted to C172s and PA-28s, and of course installed in the EcoFlyer. After 20 years of development and 12 years of production, the bugs are out, and the market seems content with reliability, TBO times and warranty terms. The name-change to Centurion didn't do any harm either.

The EcoFlyer 2.0 uses the 135hp engine, the 2.0S uses the 155hp version. The former has a TBO of 1500 hours, the latter of 1200 hours, so parts costs are

Robin's rocky road

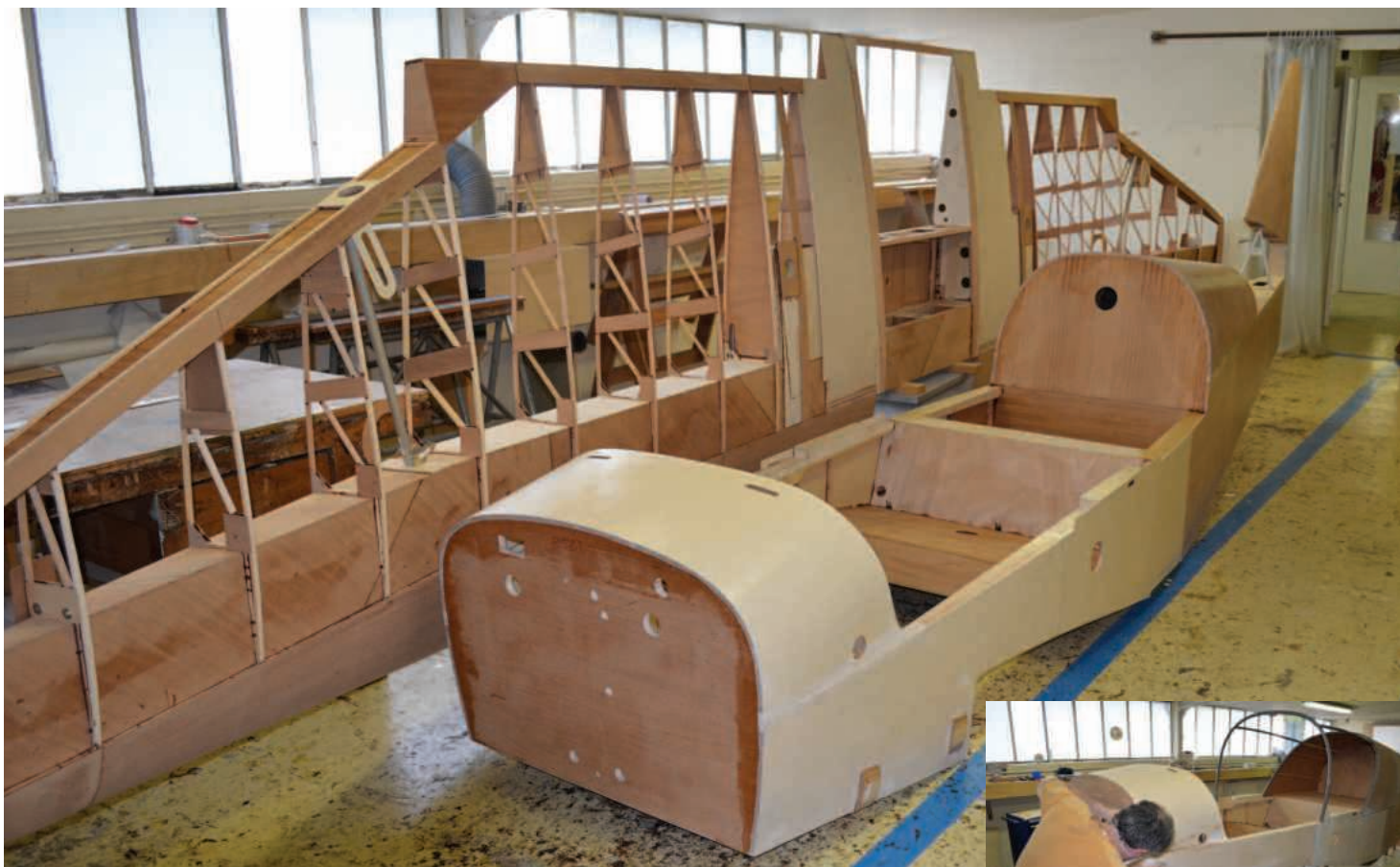
Robin aircraft have never been certificated in the United States for one simple reason – the company's never been able to afford to do the job. Because they see DR400s everywhere, pilots in western Europe get the impression there's a massive factory with every modern facility cranking these things out, whereas in fact what you've got is a bunch of proud artisans, 25 strong at the time of writing, building one aircraft a month by hand.

Robin has seen good times and bad. On occasion, it's had 150 employees and at other times it's had none at all. The backbone of the business has been the French flying club scene; half of all aircraft in French clubs are Robins, and they do 75 percent of the hours. Because of this dependency – not to mention the fact that the DR400 is such a good design – there's always going to be somebody to pick up the baton when it's dropped, as happens from time to time.

The company dates back to 1957, when it was formed by flying instructor Pierre Robin, who was also an accomplished carpenter, and designer Jean Délémontez of Jodel fame. Their first aircraft was the Jodel Robin, or DR100, which was regularly updated and upgraded before in 1972 it became the tricycle-undercarriage DR400.

In the early days the company was called Centre Est Aeronautique Pierre Robin (CEAPR). Down the years it has been bankrupt several times, and its ownership history is so convoluted that only an expert in French law with access to hundreds of thousands of documents currently tied up in a bewildering web of legal disagreements – there were at one time 30 simultaneous court cases – could unravel it. In 1996 a company called Apex Aircraft leased the goodwill of the business, or parts of the business, but that too went under, crushed by the burden of 9/11, the recession and the bankruptcy of its engine supplier Thielert. The names of Finch and Alpha have come and gone. The current manufacturer, Robin New Aircraft, has as its President Daniel Triques, who was formerly Robin's production manager, while the factory, the machinery and the parts are owned by CEAPR, which apparently always owned the type certificate. Guy Pellissier, who owned Apex Aircraft, helps out Robin New in sales and marketing support. With me so far?

With two receiverships in seven years the company, whatever it's called and whatever it owns, should be dead as a dodo but it's not. The gold nugget is the DR400, 41 years old and going strong, and now available in diesel...



**Above: how it begins – Robin is supremely proud of its experience with wood
Right: employees at Robin are artisans rather than assembly line workers**



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estimated at about 10 percent more than an equivalent Lycoming avgas engine. The diesel needs a gearbox to reduce prop RPM and it has a 600-hour TBO. The friction disk (effectively the clutch) is also 600 hours, as is the HP pump. All this comes out of the fuel savings. But as Robin's Guy Pellissier says, over the lifetime of the engine, replacement parts will come out at less than €5 an hour, which quickly vanishes into the fuel saving. The EcoFlyer comes with an optional 50-litre auxiliary fuel tank which takes endurance out to about eight hours in the 135hp 2.0, which burns 20 litres an hour – the 155hp 2.0S burns three litres an hour more.

The visible differences between the DR400 and the EcoFlyer 2.0S are few; there's a power bulge on the left side of the engine cowling to accommodate the alternator, and the air intakes on either side of the spinner have fibreglass guides – on the port side, to improve the airflow around the radiator, on the starboard, to feed the turbocharger. There are extra air intakes in the actual cowling. Other points to note are the absence of wing tanks, and the aluminium door to the baggage compartment, replacing the Perspex of the DR400. The Centurion 2.0 has a dry weight of 134 kg, which is 17 kg more than the O-360 in the Regent. Another 13 kg comes from beefing up the airframe to

cope with the engine. This has been done by choosing wood of slightly greater density. It's the same Oregon pine, but Robin just selects different bits. The company prides itself on its understanding of wood – “nature's composite”, as Guy says. Pierre Robin himself was a cabinet-maker, and Robin staff are artisans rather than assembly-line workers.

The aircraft I flew, F-HECA, was built as a glider tug and has the quieter and more efficient three-bladed square-tipped propeller. The panel is fairly simple – you can choose the Garmin G500 or Aspen glass cockpit versions if you wish, but given the work that this plane is going to do, there's no real need for it. What it does have is a mount and a jack for your iPad; the way in which Apple is streaking ahead of our sclerotic, antediluvian and murderously expensive certification system is a joy to behold.

20-year warranty

The EcoFlyer also comes with a bespoke sort of flight data recorder, where a selection of engine parameters are recorded on data cards which may be downloaded at 50-hour check time, or sent

automatically via GSM to a central computer, so a complete record can be kept of the aircraft's performance. Not only does this allow an operator to keep track of exactly what the cack-handed gorilla who rented his aircraft did with it, but it's fundamental to Robin's new offer of a 20-year



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warranty on these aircraft. The factory can keep track of the uses and abuses to which the EcoFlyer has been put, and without that information a 20-year warranty would not be feasible. Normally, the panel simply sports a small light which is out when the recorder is working; F-HECA has a more sophisticated system with separate cards for an instructor and a student, so flight



Above: EcoFlyer panel, with single power lever – yellow handle is for glider release

Right: iPad mount, and beneath it the flight data recorder cardholder

Left: CED shows revs at idle (900) and temperatures coming up, all else optimal

Below: contrary to normal practice, stick in the left hand, power lever in the right



information could be accessed afterwards for teaching purposes, log-book keeping, invoicing, maintenance schedules and so forth.

The aircraft has a 'CED' – Compact Engine Display – instrument which tells you everything you need to know about how your engine's doing. There are digital fields at top and bottom, the top one for the prop RPM, the bottom one for percentage power. Then there are a series of bars, yellow, green and red, for oil pressure and temperature, and for coolant temperature and gearbox temperature. With everything in the green, you're good to go.

Starting is simplicity itself. There's only one power lever, a quadrant arrangement falling to the pilot's right hand. There's no prop control, no mixture to deal with. There are battery and 'engine' switches on the left of the panel, with guarded alternates beneath. The 'engine' switch turns on the FADEC. Next to them there's an auxiliary fuel pump switch. The only other thing you need is the ignition key. Check the fuel is on, the power lever is at idle, battery on,



engine on, watch a 'preheat' light until it goes out (that took about five seconds on an eight degree day) then turn the ignition key. Presto! The engine fires, catches and rumbles up to around 900 RPM, the power readout shows seven or eight percent. The internal noise is lower than in the DR400 and even at high revs, it is possible to fly without headsets. The oil and coolant temperatures took two minutes to move from an amber mark into the green, and we were ready to roll. No carb heat, no mag checks of course... just set trim, flaps to the first notch, aux fuel pump on, Ts and Ps good and push the

power lever to the firewall, no finesse required.

(Incidentally, visitors to Robin's factory at Darois outside Dijon will know that aircraft must taxi across a public road to get from the hangars to the airstrip. I dread to think how the authorities in Britain would react to such a thing, and how many bureaucrats would be needed, at what cost, to evaluate the dangers and say 'no'. The French have developed a cunning system for dealing with these dangers – they wait until there's nothing coming, then cross.)

Acceleration was certainly impressive, but I didn't feel entirely comfortable on that first take-off. The main issue was the stick and power lever position. The DR400 has two plunger-type throttles, one at the pilot's left hand, the other in the middle. So I've always flown with the right hand on the stick and the left on the throttle. With the EcoFlyer, the power lever is in the middle, so you'd want your left hand on the stick and your right on the power. It just felt a bit unusual, that's all. There's no tendency for the power lever to reduce automatically, it

couldn't, so you could just push it in and leave it, fly with your right hand on the stick, then change hands when you needed to change power settings. Might be better just to get used to flying with your left hand on the stick. The handgrip on the left side is configured to be held by the left hand, with your elbow supported on the shelf just inside the canopy. The other discombobulating item was the ASI, which was calibrated in kilometres per hour, with knots on the inner scale. Obviously EcoFlyers sold in the UK have an AIS calibrated in knots, so it's not an issue – just me having a moan.

We began to rotate at 100 kph and unstuck around 110; the nose certainly felt heavier, and more back pressure was needed on the stick than with the DR400. There was a healthy crosswind, but I got the impression she'd also need a little more right rudder in still air. There's an electric rudder trim on this aircraft, the switch mounted on the stick, but the leg pressure was not high; Guy told me the rudder trim comes into its own when you're making long climbs while towing gliders. We were

three up and two thirds tanks, but climb performance was good and at 100 percent power and 140kph, or 85 knots, we were making marginally under 1000 fpm. The service ceiling is 16,500, and I'm told that above the summit of Mt Blanc (15,781 feet) she was still making 400 fpm.

Flaps up and pump off, then back to 75 percent power on the downwind and the aircraft settled at 225 kph, or just over 120 knots. The immediate impression is one of greater stability than the DR400, which is itself one of the more stable light



Flyer magazine

into play during the flare, when more back pressure is called for on the stick, but the touchdown is pure Robin – the aircraft compensates for the pilot's mistakes.

It remained only to wait for the buses to go past then taxi back to the hangars. Shut-down is even easier than start-up – power to idle, ignition off, engine switch to off, battery off. I was left to listen to the engine ticking and contemplate the fact that you couldn't consider buying a piston single without looking closely at the EcoFlyer. It's had a stop-start development history and that's given us time to evaluate empirically

the consumption of parts. The bottom line is that a massive saving on fuel is partly counterbalanced by an additional cost in parts and labour over the life of an engine – see sidebar below. One would expect that the saving would improve further as TBOs go out. Given the excellent performance and handling characteristics of the EcoFlyer, the geographical limits to the availability of avgas and the nagging doubts on fuel provision which would seem to make it sensible to own an aircraft that would run on diesel, there are a lot of positives that should make the EcoFlyer the success story Robin is looking for. ■

Left: the modern Robin comes with a glass cockpit – choice of Avidyne or Garmin
Below: the EcoFlyer airborne above the hills near Robin's factory outside Dijon



singles. The EcoFlyer can very easily be trimmed out to fly hands-off for extended periods. It must be solely down to the increased mass, for nothing else has changed.

Playing around with the power settings, we pushed back up to 100 percent, or 2300 RPM, and she ran quickly up to 250kph, or 135 knots – Vne is 146 knots. One noticeable effect is the air-braking action from the three-bladed prop when power is sharply reduced; you're pushed forward as power comes off and you'd have to exercise caution near the stall on final approach. That said, this is an aircraft you'd fly by feel rather than constantly consulting the numbers on the CED; like all Robins, she lets you know exactly how she's feeling, and in almost all circumstances she's feeling just fine.

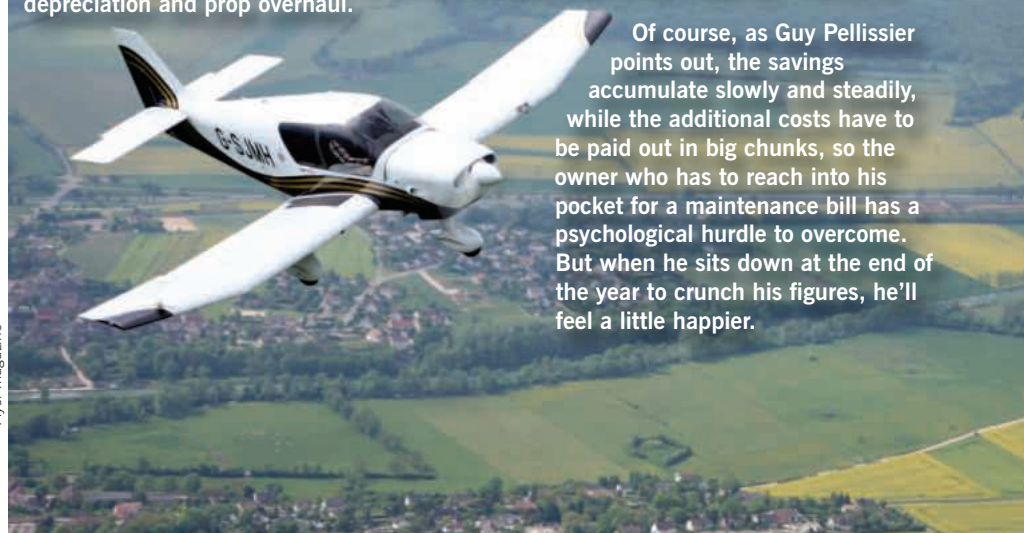
All the upper air manoeuvres show just how similar her flying characteristics are to those of the DR400; on final approach I thought there was a greater pitch change with the application of the second stage of flap, perhaps because of the extra weight up front. Certainly, the engine weight comes

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What does the money say?

It's hard to get a precise handle on how much cheaper the EcoFlyer is than the Lycoming-engined equivalent, but even if all the variables are shaded in favour of the avgas burner, the diesel still comes out well ahead.

The fuel cost per hour for the diesel is nearly £60 better than the 180 hp Régent but this is partly offset by higher parts costs. Given average usage levels, and taken to the TBO of each engine, it's fair to say that the EcoFlyer costs slightly better than £30 less per hour to run than the DR400. The hourly cost of the EcoFlyer 2-OS 155 hp is £80 inclusive of VAT and fuel duty, compared with £111 for a Régent 180, so there's a difference of £31 per hour in overall running cost to TBO, inclusive of replacing the Centurion engine and zero-timing the Lycoming but excluding hangarage, insurance, depreciation and prop overhaul.



Of course, as Guy Pellissier points out, the savings accumulate slowly and steadily, while the additional costs have to be paid out in big chunks, so the owner who has to reach into his pocket for a maintenance bill has a psychological hurdle to overcome. But when he sits down at the end of the year to crunch his figures, he'll feel a little happier.

The future of our airspace

A CAA-sponsored conference on the future of GA's airspace attracted a packed house of pilots representing every facet of aviation from microlights to business jets, military brass to airlines – and predictably, there were as many opinions on what should be done with Class G as there were pilots present.



Over the course of five hours during which the state of the air was dissected and critiqued there were many 'full and frank exchanges of views' and little in the way of a meeting of minds. At the end of the day, at least everyone knew where everybody else stood – pretty much where they stood at the beginning of the day.

But it was a useful debate that set out unequivocally the problems that have to be faced, and it was clear to most that the only thing that's not on the table is the status quo. Changes already in train, such as the push for continuous climbs and descents, could free up controlled airspace, while commercial pressures are pushing the other way. The system is creaking, and something's going to give.

Speakers included CAA Chief Executive Andrew Haines, Air Vice Marshal Stuart

Atha, IAOPA General Secretary Craig Spence, IAOPA Senior Vice President Martin Robinson, easyJet pilot Captain Robert Legg and Sir John Allison. Opinions varied from the no-new-equipment, no-new-restrictions standpoint (mainly microlights and some gliders) across the spectrum to make-'em-all-buy-TCAS (airlines) with every shade and nuance in between.

Some members of the audience wanted to discuss RNAV and PNB, some neither knew nor cared what that meant. But it was generally agreed, or not disputed, that commercial air transport had run away with the airspace debate and that the airlines' position, which dismissed the issues by merely calling for the "management of impacts on non-commercial interests" is greedy and unacceptable.

The conference was held against the background of a revolution in the CAA, where the multifarious officers dealing with bits of GA have been brought together into a new department called the Safety and Airspace Regulation Group (SARG) and headed by the former Director of Airspace Policy Mark Swan – who was one of a raft of CAA figures at the event, held at the

Royal Aeronautical Society in London. In an exercise designed to introduce the left hand to the right hand, if necessary by amputation, the CAA has set up five teams covering Intelligence, Strategy and Policy, Flight Operations, Airworthiness, Airspace ATM and Aerodromes, and Business Management. The idea is to join up some GA-related functions which have hitherto been handled by different groups or individuals in the authority, sometimes in ways that were mutually incompatible.

In fact, Andrew Haines began by repeating the CAA's apology for the recent Horlicks it made of licensing, with some pilots waiting several months for new EASA licences. That problem has been taken firmly in hand and waiting times are now getting down to the target five days or less. The new five-team system, he said, was designed to give GA a better crack of the whip. "Mark is under a remit from the Board to enable GA to survive and thrive," Mr Haines said.

The fact that the airspace conference was happening at all is an indicator of how much things have changed at the CAA. In the past, the Authority would have parleyed with the airlines, a few airports and NATS, and GA would have ended up as collateral damage in whatever resulted. GA is a broad and troublesome church, throwing up hard problems which it is often easier to ignore, and it is to the credit of the CAA that it

Rights and responsibilities

AOPA Chief Executive Martin Robinson told the conference that equitable access to airspace was an absolute right for all – but with rights came responsibilities, and we have a duty to engage with the programme that aims to address some intractable airspace problems. Everyone should want to reduce GA on GA mid-air collisions. "There are 18 in European airspace every year, half of them fatal," he said.

There was a need, he went on, to include in FAS an avionics deployment plan, with a cost-benefit analysis. If equipment that gave greater conspicuity and situational awareness was needed, it must be portable, lightweight, and affordable. Where possible, goals should be achieved through the use of non-certified equipment – the game-changing iPad was the best example of how technology had far outrun regulation. There was also a need to reduce certification costs, where certified equipment was necessary. If portable, lightweight, low-cost equipment became available, would there be a case for parts of Class G to have equipage requirements?

Satellite-based approaches should be established at as many GA aerodromes as possible as soon as possible, he said. "EGNOS is available today – why are we not making use of it? There are Bluetooth receivers costing less than £100 for EGNOS, WAAS and GLONASS. Even terrain information is available via the iPad, when all else fails. Does GA really need anything more accurate? Certified Jeppesen data is available on the iPad, including approach plates. British Airways

Below: Speakers Martin Robinson (left) and Andrew Haines, CAA Chief Executive



is issuing all its A380 pilots with iPads.

If there was industry-wide consensus on what an electronically-visible solution should be, a basic requirement could be established, as long as it cost no more than £200 to £300. As an example, the Airbox Aware, which gives airspace boundaries warnings, costs £150.

"For years we've been trying to convince regulators that the risk of failure with new devices is sufficiently low for certification to be granted, but we're still waiting.

"In the meantime pilots take non-certified equipment into the cockpit because they want to improve their own safety – an example of the real risk which comes from regulatory delay.

"GPS overlay approaches, as certified by the CAA, are available at some airports. How many GA pilots are flying these approaches today? Why are we still teaching non-precision approaches using VORs and NDBs?

"As Instrument Landing Systems become redundant in France, they will replace them with SBAS/EGNOS approaches. Many UK airfields and landing sites for rotary aircraft would benefit from such a development.

"The iPad is providing many pilots with navigation, weather and in some regions traffic information, so perhaps FAS should encompass a



Left: Speakers AVM Stuart Atha, Sir John Allison, Mark Swan and Andrew Haines

seeks to genuinely engage with the little end of the business. Mr Haines characterised the conference as an opportunity to table new thoughts and bring forward practical suggestions without reflecting too much on past grievances – although he himself brought up the topic of Mode-S as an example of how not to do it. “The words ‘lead’ and ‘balloon’ can be associated with how well that was received,” he said. “In the future, equipment has to be targeted where the need is demonstrable.”

He went on: “The UK’s Future Airspace Structure, part of our commitment to the Single European Sky, has been characterised by the incoming head of EASA Patrick Ky as “the only credible FAS in Europe” and it is essential because UK

degree of technology modernisation in how we use Class G.

“Class G is synonymous with GA’s rights and freedom to fly. The regulatory process may take five years, so by the time new equipment is certified, technology will have moved on. So let’s be more innovative in developing future solutions.

“Should the FAS group be thinking about future systems that are based on software updates? Or plug and play? In setting the standards, it should be possible to leave it up to the owner/operator to decide how they want to achieve the requirement for the airspace they

airspace is horribly out of date.

“The basic structure was laid out 40 years ago,” Andrew Haines said. “Since then there has been a hundred-fold increase in demand for aviation, and we have responded with sticking plasters which have themselves caused restrictions and hotspots. Airspace structure is too complicated and excludes GA from large areas, while commercial operators fly through Class G to get to some sizeable airports.”

The CAA, he went on, is not in a position

Holding the line

The most outspoken supporter of the status quo was Air Chief Marshal Sir John Allison, a former military pilot and President of the LAA. Safety was not the issue, he said. “We are happy with the level of safety in Class G,” was his message.

The level of safety appropriate to today’s Commercial Air Transport cannot be delivered in Class G, but removal of Class G is not reconcilable with the needs of other users, he said. CAT’s requirements for flight in Class G would cause a loss of freedom, imposing constraints that would render flight impossible or greatly emasculated for many. “Flight in Class G is elective, if others find the level of safety too low, they don’t have to go there,” he said.

There had been talk of GA ‘safari parks’ which would be ghettos for large sections of the flying community, but this was totally unacceptable. “GA must have a continuous area, not just isolated pockets,” he said. “We’re already facing the demise of contiguous Class G in the south of England, because of the commercial interests of others. The only agenda is to make Class G suitable for use by CAT, but this dream is unattainable without unacceptable loss of freedom for recreational flying.

“The only redesign we should embrace should bring benefits to our community, such as the collateral benefits of continuous climb. At some point we have to say enough is enough, and that value to society is not to be measured in commercial terms alone.

“The term used at the Future Airspace Strategy/NATMAC group, the ‘manageable impacts on non-commercial operations’ just shows the arrogance, self-confidence, the mindset, the feeling of invulnerability that lies with the vested interests that assisted in the writing of those words.

“All problems could be solved at a stroke by denying CAT access to Class G airspace below 10,000 feet. We are all required to use Class G within the rules, but to seek to change the rules because you can’t meet them is not reasonable. We’re in a fight for survival here, and there isn’t much room for compromise.”

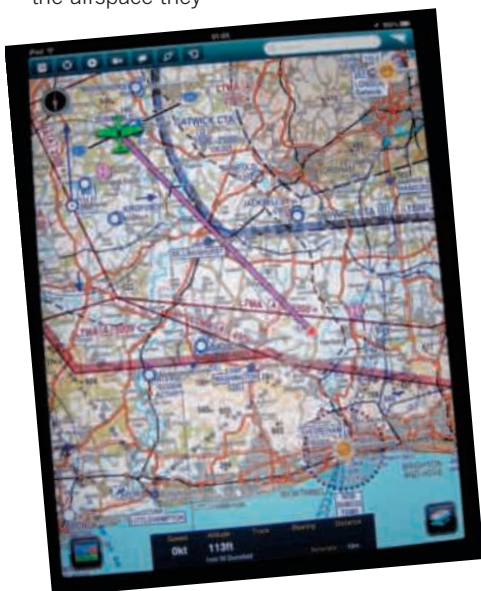
wish to operate in.

“And let’s deal with certification, where it’s needed, in a way that allows for the development of a GA standard, ultimately leading to affordable equipment which

provides real safety benefits to the ‘system’ which should, in my opinion, be the overall beneficiary, so it may require external investment in line with Single European Sky funding principles.

“The challenge is to improve safety in Class G without changing the classification, which allows access to all, whatever their level of equipment.”

Left: the iPad, where technology is running far ahead of regulation





Bringing the boys home

Air Vice Marshal Stuart Atha, a Harrier and Typhoon pilot who is Air Officer Commanding the RAF's No 1 Group, set out the military's approach to operations in Class G, and warned that there's going to be more of it in the very near future.

Withdrawal from Afghanistan means that from next year, aircraft that have been operating in that country will once again be operating in the UK. "There will be an increase of 1,000 hours a week in military flying that is currently being done in Afghanistan," he said.



Left: The conference brought more than 100 interested parties to the Royal Aeronautical Society Above: the Lightning II spends less than five percent of its time below 2,000 feet

Set against that will be the fact that greater use is being made of synthetic resources, with the goal being to 'fly' half of all military hours on simulators.

At peak, the RAF was flying 70,000 hours a year in the UK, and currently it's less than half that. It won't return to original levels partly because of sims, partly because of cuts, and partly because



of different flying regimes – the Typhoon, for instance, spends less than five percent of its time below 2,000 feet while the Lightning II, the Joint Strike Fighter, takes advantage of "game-changing stealth capability" which does not involve low flying.

"There are many other military users who will fly low, however," AVM Atha said. "Legacy assets such as the Tornado and the C130, for instance, but as the Army comes back from Afghanistan there will be increased helicopter activity at low level."

Against all that will be the fact that far more use will be made of synthetic training. The current rate is 80 percent flying, 20 percent simulator, but the goal is to increase simulator training until the rate is 50/50. "That means that when you do fly, it needs to count," AVM Atha said.

There will be only three bases for air combat flying in the UK – Lossiemouth, Coningsby and Marham. Flight training will be carried out at Valley, Culdrose, Shawbury and Cranwell, and they will be busy. Conflict with other Class G users is a constant concern, but the most recent mid-air was military-on-military, when three aircrew were lost over the Moray Firth last year. It had been decided to equip all aircraft with TCAS as of October next year.

AVM Atha reviewed the security issues surrounding the Olympic no-fly zone last year, although his characterisation of the operation as a great success was perhaps less enthusiastically endorsed by his audience. The air security plan was the only element of security that was led by the military, and AVM Atha was tasked with having a ten-minute buffer in which he could identify and take any necessary action against intruders. In the event the area covered by Olympic restrictions did not give him that ten minutes, but compromises were made.

During the Games there were 10,000 movements, 20,000 flight plans were filed and only 13 infringements were reported to the CAA.

From the military standpoint, AVM Atha said more education was needed on what ATSOCAS means, they needed to have a better understanding of the glider world – where they're likely to be, what they're likely to do.

"We have established regional airspace working groups, where we get everyone round the table in order to understand what each other is doing, and how can we operate alongside each other," he said. "Airspace is a shared resource, and it must be used efficiently and flexibly. The key to the way forward is an integrated approach, and it's time for everyone to put their shoulder to the wheel." ■

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Big, heavy, fast, short-sighted...

The airlines' position on Class G was set out by Captain Robert Legg of easyJet, and as well as setting out their worries, it illustrated some of GA's problems with the airlines – partly by what was assumed, and what was not said. Captain Legg made a strong pitch for conspicuity in Class G, but his story would have looked very dodgy in a liability court. The question in most minds was why airlines are operating in Class G at all, given that safety has to be their first concern.

Basically, Capt Legg said it's very difficult to see out of a modern airliner cockpit, a lot of pilot time is spent heads-down, they're operating at 250 knots and if you don't show up on TCAS they'd find avoiding you difficult, if you get in their way. During questioning at the end, he was asked why they're operating in see-and-

Right: Capt Robert Legg, Craig Spence, Andrew Haines, Martin Robinson and Mark Swan



avoid airspace if they can't see and avoid, and it's a very pertinent question.

The justification is entirely commercial. As Capt Legg said, Stobart has invested a lot of money in Southend. We waited for more, but that's it. Is a reduction in safety justified by a private company's quest for profit? Must the rest of aviation get out of the way so an airline can take bucket-and-spade holidaymakers to Newquay? It's an arrogant assumption that's never been tested.

But undoubtedly it creates a problem that must be addressed. An A320 with 180 passengers on board flying at high speed through Stapleford's flight training area, with the pilots peering out of their little letter-box window, is not to be encouraged.

Capt Legg started by saying he was a late replacement for a colleague from Flybe, who spend rather more time than easyJet in Class G. From easyJet's perspective the Class G hotspots – in which they see “an increased risk of airborne conflict” – are around Southend and Newquay, Inverness, and in the en-route sector between Newcastle and Belfast.

“We operate inside controlled airspace wherever possible because it gives us the greatest protection, and we always fly IFR,” he said. “We always use a suitable ATC service where possible, and the preference is for a deconfliction service.”

“We operate in Class G because some airports are outside controlled airspace, and there's a commercial driver. At Southend, for example, Stobart had invested a lot of money and were keen to attract traffic. Sometimes to obtain direct routings and for weather avoidance we fly outside CAS. Do we really want to fly to an airfield outside CAS? If we wanted to be completely safe we'd stop flying altogether. There is a risk to flying in Class G, but others are greater – CFIT, for instance, or runway incursion. There are risks to flying inside CAS, too – we make our own risk assessments.”

easyJet's hazard planning includes talking to the GA operators around Southend to find out where they do their training and where the expectation of seeing other traffic can be higher. The company has some 2,000 pilots who might find themselves operating out of Southend, so the pilot briefing is intensive. There are standard operating procedures to deal with the issues. Capt Legg showed a photograph of an A319 cockpit which illustrated his point that there's very little window and a lot of clocks. ATC and TCAS are the main defences against conflict, he said...

Andrew Haines himself asked Capt Legg: “Are you effectively excluding yourselves from Class G because you

can't see and avoid?”

Capt Legg replied that maybe the modern environment we need more equipment in Class G.

Director of Airspace Policy Mark Swan said that by statute the CAA had to look after all users, and if the kit was not suitable for certain types of aircraft, that had to be taken into consideration. “We need to get every side of the argument,” he said.

Capt Legg concluded: “There is no such thing as safe in this pot and unsafe in the other pot. It's all about creating a known traffic environment, however you do it.”

While Southend, Norwich and Farnborough are only the latest to

head down the Class D route, much uncontrolled airspace has been lost in recent years and there is a commercial imperative for smaller airports to attract CAT. But as one questioner said, if easyJet has established from its hazard analysis that its operations at Southend are safe, and if the CAA has agreed, why does Southend now need Class D? ■ →

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Too much of a good thing

Craig Spence, General Secretary of IAOPA, warned the airspace designers the world over tended to err on the side of over-classification, and that this often imposed on controllers a greater workload than they could handle.



This theme was picked up by several members of the audience who asked why, when Class D was granted, was there no mandate to provide enough controllers to use it, including VFR.

Craig Spence, a former USAF pilot involved in airport management for 16 years, said: "Over-classification of airspace is a tendency of airspace designers seeking the best result for controllers, but they may overload the controllers ability to handle the traffic." But he added that the experience in the United States was that airspace around major airports should be freed up because Performance-Based Navigation (PBN) meant properly-equipped aircraft could maintain more accurate trajectories. Most aircraft could not reasonably equip with RNAV, however, nor their pilots commit to the training. But he spoke of a country in which there were already 12,131 instrument approaches relying on GPS, as of last July,

where the adoption of GPS approaches was reducing reliance on costly ILS systems, increasing capacity and greatly increasing safety. The majority of GA already has GPS, he said, not because of mandate but because of user benefits.

"Mandate is a four-letter word," Craig said. "There might be a case for it if 90 percent have equipped for user benefit and you need to get the other ten percent over the line, but you'd have to be talking in terms of something the size and cost of your iPhone that you can strap to your microlight."

Many questions

There were countless questions from the audience covering every aspect of what had been said by the panelists. One theme was the cost of technology – the research and development designed to bring it to market and who would pay for it. Geoff Weighell, Chief Executive of the BMAA, said that in many cases the technology could be worth more than the aircraft. Was there not a non-technical solution? Others asked whether the CAA, or any other body, could fund the seed-corn spending on R&D for the lightweight, low-cost, portable equipment GA might need?

Martin Robinson said NATS was already involved in promoting technology. Jonathan

Smith, NATS' lead on infringements, has been involved with Airbox, who produced the Aware anti-infringement tool, and with SkyDemon in developing its excellent online route-planning systems. "We are looking at a lightweight portable ADS-B transceiver," Jonathan said. "We will try to stimulate the market at a price that will take you people with us. We have to take the GA community with us, because unless you're willing to go out and buy it, you'll probably not see it. Getting GA to equip voluntarily is a real challenge, but we have gone out to stimulate the market..."

LARS is being looked at with a view to improving availability, which will mean in future more civil units and less military ones. This would allow for wider coverage at weekends and this too is designed to improve the safety of operations in Class G.

Julian Scarfe of PPL/IR asked what steps the CAA taking to ensure NATS respects the principles of equity of access by using RNAV routes in controlled airspace. For the CAA, airspace policy director Phil Roberts said that the issue of RNAV approaches to non-instrument runways was going out to consultation later this year.

The ultimate Catch 22 was pointed out by one pilot who said that if airlines had convinced themselves and the CAA that operations in Class G were safe, why were they now claiming that they needed Class D? But while it exposes the fudge, it doesn't address the problems it creates. ■

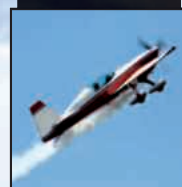
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