

# Letters to the Editor

## Start them young

Sir,

An article in *General Aviation* (December 09) on 'Aviation needs more women' declares the paucity of women in aviation and the need to encourage more to join. I am wondering how the new committee is going to tackle this. Are they merely going to look at the university echelons of career-minded people or are they going to start at the beginning? Children start forming ideas of what they might like to do when very young. They are influenced by their home, school and outside world environments. If, in these environments, they see men as pilots then their minds will grow on the idea that aviation is a man's job and that it is only very different women who would go for it. If, on the other hand, they grow up with the idea that aviation is equally for males and females then it is far more likely that women will go for aviation.

So as a starter, what about infant story and fact books where aviation is either the topic or part of the topic, and males and females are in equal proportion. It should not be treated as something unusual but as if it were standard for females to be in these jobs. Children's magazines could have stories and facts on aviation, again with males and females in equal proportions as if that were the norm. Schools welcome outside speakers – have aviation going in to schools with an equal representation of male and females. Okay, females are a bit sparse on the ground and will have to do extra work for the moment. What do careers leaflets and talks for aviation show? Ensure that every schools' career department has information showing equality. Make sure the teachers are aware that it is equal opportunities – for a Science teachers' conference I am having a female rocket scientist as my keynote speaker. In class my students go 'oooh' at my being a pilot because of being the pilot, not because I am a female pilot. I introduce aviation-related topics in a range of subjects for a bit of fun and hopefully as a female, conversant with these topics, it puts the idea of equality into the subconscious of the students. Each summer I

offer flying sessions for teachers to give them a feel for aviation. I emphasise that our CFI is female, that is there is space for females in aviation.

So what is this committee going to do? I hope it will realise that it must start right at the beginning and instill equality in aviation into the youngest minds. To go with this it needs to work on the older minds with the teachers.

I wish it luck.

**Jane Giffould**  
PPL, Essex

## 'It's not a tax, honest...'

Sir,

I would like to thank Martin Robinson for drawing attention to Ofcom's consultation on aeronautical spectrum fees (February 2010 edition of *General Aviation*). This is an important initiative which we are continuing to discuss with AOPA, LAA, BBGA and others. Nevertheless, I would like to put the record straight on a number of points.

Our objective in proposing to apply AIP fees is to improve the efficiency with which spectrum – a scarce resource – is used. Independent research and other commentators, such as the CAA, have repeatedly said that there is excess demand for spectrum used for aeronautical VHF communications. AIP licence fees will help manage this excess demand, freeing up spectrum over time for those in the aeronautical community that need it most.

Ofcom has no view on whether or when aviation should adopt 8.33 kHz channels at lower flight levels. This is a matter for the CAA, European regulators and the sector they regulate. What we have said is that, as 8.33kHz channels use less spectrum than 25kHz channels they should attract proportionately lower fees.

We believe this will act as a useful reminder of the value of radio spectrum, and may cause some aerodromes to feel more favourable towards 8.33kHz, but it is unlikely to cause a radical acceleration in the pace of change. Importantly, we are not proposing to apply AIP fees to aircraft radio licences, so these proposals will apply only to ground stations. We are separately reviewing the processes for granting aircraft radio licences and the expectation is that these fees will fall.

Safety has been a top priority when considering changes to fees. While we recognise that this area is carefully regulated, we do not share the view presented by Martin that no change, other than universal 8.33kHz deployment, is possible. We noted in the consultation document that the CAA does indeed have adequate powers to ensure safety at aerodromes. This does not mean, however, that any attempt to use spectrum more efficiently will be met with new CAA regulation. Rather more simply, we believe AIP fees will cause aerodromes and providers of air traffic control services to review their individual spectrum needs.

Finally, having met with Martin recently, I am surprised he says that, from the GA perspective, little has changed since we published our outline proposals in 2008. In fact there are a number of very significant changes:

Back then we proposed that aerodromes should pay fees for the valuable spectrum needed for radar and other aeronautical navigation aids, whereas now we are saying government should manage this spectrum and we are no longer proposing any AIP fees. This represents a significant reduction in costs.

Originally we proposed a single fee of

£4950 to apply to all aeronautical VHF 25kHz frequencies, whereas now we are proposing a much more granular set of fees to be phased in over five years. This is reflective of the wide variations in the ways in which the spectrum is used by the sector, with further discounts to apply in the north and west. For example, we are proposing that the fee for A/G should rise initially to £400, increasing over five years to £2600. The sporting frequencies typically used by gliders, balloonist etc would attract a fee of just £75.

These changes were not prompted by a "barrage of complaint" as Martin claims but, rather by a range of intelligent considered comments on specific relevant issues made by different stakeholders in the aeronautical sector (including by AOPA). We remain open to further such helpful comments.

**Michael Richardson,**  
Ofcom Spectrum Policy Manager

Well done for being so reasonable. Perhaps we can address a few issues:

- There is no shortage of frequencies. IAOPA has shown that replacing the 27 frequency allocation offices in Europe with two guys in Brussels would free up all the spectrum we'd ever need. The 'shortage' is artificial, created by mismanagement and allocation inefficiencies. NATO has addressed this, with great success. Why can't you?
- The EC has now mandated universal 8.33 kHz at all levels, so bang goes your fig-leaf – there's no need for Ofcom to 'incentivise' it.
- Thank you for withdrawing the plan to tax the emergency services for their frequencies, and airfields for the approach systems which recover the paying public safely in bad weather. I'm sure the outraged reaction of the public had nothing to do with the decision. But why should other safety systems still be taxed?
- The CAA has recognised the parlous economic state of small airfields by removing the licence requirement for flight training, which might save them a couple of thousand pounds each. Then you come along and replace the licence fee with a radio tax and we're back to square one. Discuss.
- Aerodromes will obviously amalgamate frequencies and drop ATIS; active frequencies will become more congested, more transmissions will be stepped on, safety will be reduced, but you'll get some money.
- Or will you? A/G services at other aerodromes will close; pilots will make blind transmissions (free of charge) on approach, safety margins will be eroded and you won't get any money.
- What are you doing to make the massive amount of spectrum freed up in the 600 MHz to 800 MHz bands by the digital switchover available to other users? You've 'cleared' about 120 MHz worth of prime RF spectrum; will you use it to increase efficiency, or raise money?

David Cameron has been reported as promising to the Reform think-tank: "With a Conservative Government, Ofcom as we know it will cease to exist. Its remit will be restricted to its narrow technical and enforcement roles. It will no longer play a role in making policy."— Editor

## Safety of life

Sir,

I note from February's GA that Ofcom are still intent on taxing safety. They clearly still do not

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understand the reason why aircraft need radio systems, and their clear aim is solely one of revenue generation.

Ofcom need to understand that all aviation VHF frequencies are 'safety-of-life' frequencies, irrespective of technicalities. Whether the need is for an airline to call its operations centre to arrange a wheelchair for an inbound passenger, or for a light aircraft pilot to be advised of traffic in the aerodrome circuit, or for a pilot to know that the destination aerodrome is out in fog is, frankly, irrelevant. All these are needs with a safety-of-life connotation and we simply must not allow Ofcom to tax safety in the way they propose.

So-called 'sporting frequencies' are also intended for safety purposes. Many a glider pilot has been very grateful for the ability to know the whereabouts of other gliders in his/her immediate vicinity, substantially reducing the potential risk of a fatal collision.

Other countries permit the use of GSM mobile telephones in light aircraft and equipment to facilitate this is now widely available in the UK. Instead of paying Ofcom's safety-tax, it is highly likely that many non-public transport aviation information facilities will be accessed by use of airborne Internet systems with embedded 3G connectivity. Ofcom might say that such things are illegal in the UK - but as they are widely used in the more congested airspace of the USA, Ofcom would have to give a very good reason for their illegality in the UK - something rather more convincing than 'nanny knows best, dear'. In any case, who would ever know if such systems were in fact being used? Widespread civil disobedience often follows unreasonable regulation - remember CB radio in the early 1980s?

Unless Ofcom themselves accept that taxing safety is wholly unreasonable, it seems that only a change of government will lead to a substantial change in Ofcom's remit. Hopefully this will happen very soon and the immoral scourge of safety-taxation will be given the wholehearted rejection it undoubtedly deserves.

**Nick Wilcock**  
AOPA IC and MWG member

### Can't pay, won't pay

Sir,  
I really enjoyed reading Mike Hamlin's article on flying the Citation. Actually, I always enjoy reading the magazine, though bad news predominates.

With respect to Ofcom's charging scheme, we now have to take a stand. Refuse to pay this tax. We owe it to ourselves and to future generations; once a new tax comes along, it never goes - it grows. Why should pilots pay for the abysmal economic management for which we have no responsibility? We're too compliant. Us Brits could take lessons from the French, who are quite capable of instilling fear in their politicians and hence get much more respect than we do from the UK government. Our only remaining weapon now is to go on strike, and AOPA is the only organisation capable of co-ordinating this.

The way we're going, private flying will be extinct within 20 years. I will do whatever I can to help. Remember - we pay for these people, they work for us.

**Steve Devereux CEng**

### AIS online?

Sir,  
I religiously phone the AIS Information line before every flight, but am I the only person

who thinks this information would be better provided online? It's ok when there are just one or two upgrades, but one day this summer, I rang the information line, and was informed there were twelve airspace upgrades and three restrictions of flying. My heart dropped as I listened to a five minute string of numbers. The relevant ones were somewhere in the middle, and I had to call three times to get all the digits down!

Later on, while doing some circuits, ATC told me to come to a full stop as there was a Royal Flight passing overhead. I'd completely missed that in the middle of the incomprehensible deluge of information on the phone. Surely there has to be a better way to provide this information?

After all, it would have been my fault had I got in the way of the flight.  
Just a thought!

**Name and address supplied**

### Future aviation fuels

Sir,  
Prof Marmont's article (*General Aviation*, October 2009) could not cover all the subtleties of how air fuel synthesis (AFS) fuels will be brought to market. Mr Alder's comments (*General Aviation*, December 2009) are correct as far as they go but I hope the following will remove his concerns.

Air Fuel Synthesis Ltd agree that oil companies are unlikely to be involved in AFS fuels until they have fully amortised the enormous capital they have invested. However, it is a central advantage of the AFS route that you do not need to be an oil company to set up an AFS fuel production plant. AFS may be built anywhere by anyone with the investment capital and the will to do it. There is no minimum entrance scale to AFS fuels. AFS plants may be tailored to any size: large organisations, entire small countries without oil reserves, or oil refinery-sized for large national requirements such as the UK.

We do not think that the oil companies have a complete stranglehold on the distribution network. There are two areas that can easily be made independent of the oil companies, namely the aviation sector and the supermarkets who already have a significant distribution network. Imagine if one airline or a consortium of airlines built their own AFS plant for UK aviation supply and this approach spread throughout the world; or if one supermarket or a consortium built an AFS plant to feed their existing petrol pumps! What would that start?

Mr Alder raises the apparent problem of the intermittency of renewable electricity. About 95% of the electricity required to drive an AFS plant is used to extract carbon dioxide from the atmosphere and to generate hydrogen; only 10% is required continuously to power machinery. As CO<sub>2</sub> and H<sub>2</sub> are easily storable in very low-tech gasholders as a working buffer, intermittency is easily accommodated. Just scale the output of the wind turbines (quite predictable on a yearly basis) to the continuous output of the AFS plant.

Of course nuclear reactors could drive AFS plants but those reactors would have to be over and above those allocated to generating electricity for the grid for today's uses of electricity. It will take circa 7 years to bring a nuclear station on stream starting from now. Our view at Air Fuel Synthesis Ltd is that the UK does not have this time available to it before major supply problems arise. In

contrast, wind turbines, built specifically for AFS production and not grid requirements, could start to be built now, so making an immediate contribution to UK transport fuel supplies. Prof Marmont and his team come from a renewable energy background and wish to avoid the use of nuclear power stations because of their cost and increasing concerns over uranium supplies in the future.

**David Benton PhD**  
Director Research and Development  
Air Fuel Synthesis Ltd

### Oceans apart

Sir,  
Thank you for a continually interesting and informative magazine. As a retired oceanic controller at Prestwick Centre, I very much enjoyed reading Capt Tim Orchard's story of his record Concorde crossing of the Atlantic. However, the sentence: 'When we came within range of the Oceanic Controllers who are based in Ireland (Shanwick), we were treated to a slightly more direct routing across Irish airspace...' The Airways Controllers at Shannon would have assisted the more direct routing in their airspace. The Shanwick Oceanic Controllers are in fact at Prestwick and have been there since at least 1941. Until 1965, oceanic controllers at Prestwick and Shannon co-ordinated their flights into the North Atlantic airspace. But in 1965 ICAO split the two responsibilities, Shannon retaining the 'Shanwick Radio' station at Ballygirreen and Prestwick, 'Shannon Control' assumed control of the Shanwick Oceanic Area from 60N to 45N and from 30W to the eastern Oceanic Boundaries. Prestwick is daily responsible for the Westbound planning and control of the Organised Track System, while Gander plans and controls the nightly Eastbound Flow. Real time computers have assisted the controller at Prestwick and Gander since 1965 and in 2006, a combined Prestwick/Gander system, SAATS, was introduced.

On January 25 this year the new Prestwick centre was opened, containing Scottish Airways, including control of the Scottish airspace north on 55N, the North Sea, Manchester and Belfast airspace. The military controllers also control from the Centre. The Shanwick Oceanic Control Centre manages the eastern half of the North Atlantic.

**Peter Berry MRAs**

*Tim Orchard replies:* Preferring to fly in machines produced from the 1910s to the 1960s, I can clearly see that I exhibit less prowess at keyboard skills than at manoeuvring both lighter-than and heavier-than air modes of transport. Peter Berry is, of course, absolutely correct. My article's error was less the fact that I didn't know, but more the fact that whilst reducing the size of the article before publication, I stupidly did not check every word. The final article wrongly joined together parts of earlier versions which had referred separately to both Shannon and Shanwick and in so doing gave the wrong description. I have been a guest of the ATC facilities at both Shannon and at Prestwick (each during Concorde Base Training circuit details) and have been made most welcome. It is unfortunate that I accidentally explained things incorrectly in the article, but I thank Peter for pointing me, and others, to the corrected version. I hope that I have not offended our ATC colleagues too greatly... us pilot-types need them on side! ■