Avgas at £1:70? Treasury seeks a way out

fforts are continuing to blunt the impact of the European Commission's order to the British government to increase tax on avgas and impose it on avtur for non-airline use, with the Treasury seeking ways to minimise the damage the diktat will do to UK industry.

The EC has told Britain and several other countries to impose minimum levels of tax on aviation fuel which it says is for "private pleasure flying" but which seems to apply to everything non-military except the airlines Under current UK law, that means the cost of avgas must rise to about £1.70 a litre, an unsustainable level when competitor companies in the USA are paying as little as 41p a litre and don't bear the UK's crippling regulatory costs.

AOPA chief executive Martin Robinson is among industry representatives to have met Treasury officials to try to find a solution that would keep UK GA in business. He is full of praise for the Treasury's approach and says its officials understand the problems and are helping the industry to identify practical ways of moving forward.

Martin says: "It looks like the best option may be to reclassify aviation fuels and recode them in a different tax regime. That may be possible, but we must first prove that they are specialist fuels that warrant specialist treatment. That is what we are working on at the moment.

The potential disaster arose out of the blue at the end of last year when the Treasury applied to the EC for a tax 'derogation' permission to continue to levy tax on avgas at



EC fuel tax threatens us all

the same level it's been pitched at for 20 years. Back in the 1980s AOPA and GAMTA campaigned for a reduction in avgas tax to half the rate of leaded car fuel on the grounds that the basic product was so expensive that a percentage tax was unfair. The campaign was successful, and the Treasury created a special arrangement under which avgas tax was about 29p a litre and avtur attracted only VAT. Over the years, the deal has saved GA millions of pounds.

But unexpectedly, the EC refused the derogation in December and ordered the UK to apply a minimum level of tax which is immaterial because, under UK law, the special arrangement now lapses and avgas must be taxed at the same percentage rate as leaded car fuel. That means a rise of almost 30p a litre to around £1.70. And like the arsonist who blames the fire brigade when the house burns down, the EC has walked way from the problem it created.

If a new coding can be created for avgas, tax will still have to rise by about 2p a litre, which will be damaging but manageable. Martin Robinson says: "I'm afraid that's the best we can hope for. It doesn't help us compete against the likes of the USA, South Africa, Australia and elsewhere, but it won't put people out of business overnight.

"There are a host of difficulties here, not the least of which is the fact that the Treasury does not want to be seen to be supporting a leaded fuel. But there is a real safety aspect which the Treasury also appreciates. If avgas is £1.70 a litre and leaded motor fuel is 80p, motor fuel will be used in aircraft, with potentially catastrophic consequences.'

GA's fuel requirements are tiny - it uses one quarter of the fuel that evaporates from car tanks - but it's a wide open easy target for the EC. It is particularly galling that no elected politician has had a hand in this tax decision, and no elected politician, British or European, can do anything to stop it. The fundamental problem is that a tax hike that must have

looked perfectly reasonable to an EC bureaucrat in an office in Brussels becomes an unmitigated disaster in the real world. The big idea is to standardise taxes to create a level playing field across Europe. In reality, additional national charges and taxes vary so widely that the policy ends up increasing taxes for those who already pay the most and are therefore least competitive.

The UK, for instance, is the only country in the world that requires aviation to pay the entire costs of its regulator, over which the industry has no control. The regulator must also make six percent profit, and some GA companies are paying eight percent of turnover in CAA charges. As a result, the UK is placed in a hopelessly uncompetitive position not just in Europe but across the

£ 5.10 per tonne or part thereof £ 4.10 "

£ 2.95

world, and continues to export or destroy its flight training industry as it did its aviation manufacturing industry in the past. A British youth who aspires



Fuel discounts for AOPA members

n Europe, only in the Channel Islands can you get duty and tax free fuel without an Air Operators Certificate and without filling in forms or saying you are commercial, says Charles Strasser, chairman of the Channel Island region of AOPA UK.

Besides the already duty and tax free fuel available at all the three CI airports, AOPA members can now claim an additional 5% discount in Jersey and in Guernsey on production of a current AOPA membership card.

Jersey now also offers a "one stop shop" for GA aircraft of less than three tonnes at the Jersey Aero Club, where the landing and facility fee, as well as fuel uplifted can be paid at the club situated right next to the GA parking area - which is free for up to seven days. JAC staff are also available to help with hotel accommodation, rental car and taxi bookings. Engineering for G and N registered aircraft is available at VAT-free prices.

Aircraft departing from the UK and going "foreign" to the CI can claim duty drawback on the full amount of fuel carried and bought in the UK since their last foreign flight. The fuel prices for Jersey and Guernsey are published at the beginning of every month on

www.tdmg.co.uk/misc/fuel.php. For example, in February 2007 avgas was 75p per litre (AOPA discount to 71.25p) Jet A1 54p (AOPA 51.30p) and for Alderney, avgas 76.5p.

All the Channel Islands welcome GA pilots and their passengers, preferably to stay for a holiday or even to just transit for refuelling. Duty and tax free alcohol and cigarettes are also available and can be ordered on landing to be ready on departure.

Here is a list of charges confirmed for 2007 at the three airports and a comparison.

Guernsey

Private aircraft not exceeding 5 tonnes Arrival from or departure to more than 55nm Less than 55nm Test, familiarisation and training

Note – charged for both arrival and departure

If staying overnight or taking on fuel – concession £10 for S/E aircraft Parking 24 hours free – thereafter per 24 hours £9.85 for first tonne, £2.08 each additional tonne

Surcharge of 100% will be applied if not paid before departure.

Alderney

All as Guernsey, except private aircraft under 3 tonnes, parking 72 hours free.

Jersey Private aircraft not exceeding 3 tonnes Landing fee (minimum charge 1 tonne) £4 per half tonne Each practice approach £8 per tonne JAC Facility Fee (first 2 hours free) £10 per aircraft Parking 7 days (168 hours) free - thereafter £4 per half tonne per 24 hrs. All approaches not resulting in a landing are charged at full landing fee rate

Comparison	A/C 1000 to 1500 Kg	A/C 1500 to 2000Kg	Рагкіпд
Jersey	$\pounds 12 + \pounds 10 FF = \pounds 22.00$	$\pounds 16.00 + \pounds 10 FF = \pounds 26.00$	168 hours free
For stay of 2 hours or less $=$	£12.00	£16.00	
Guernsey	£20.40	£20.40	24 hours free
If staying overnight or taking on fuel S/E	£10.00	£10.00	
Alderney	£20.40	£20.40	72 hours free
If staying overnight or taking on fuel S/E	£10.00	£10.00	

to be an airline pilot by the integrated ATPL route is already looking at a bill of £120,000 just to be able to apply to an airline, with no guarantee of a job. Elsewhere in the world it might cost less than half that, or be paid by an airline sponsor. And when elected politicians can do nothing about it, even the most ardent supporters of the European Union must start questioning its value.

Several hundred AOPA members wrote to their MPs as a result of a request by email and



in the February issue of General Aviation, and most have received a copy of a form letter sent to the MPs by Treasury Minister John Healey. The letter holds out only vague hope that the situation could be saved. While saying twice that the new tax level applied to "private pleasure adde no stab at defining who would

flying" it made no stab at defining who would pay and who wouldn't, how the tax would be applied and by what mechanism tax on avtur would be differentially applied to airlines and GA.

Most curiously, Mr Healey's letter says: "I should also explain that, far from representing a loss of tax sovereignty, more generally the Energy Products Directive (under which the UK applied for a derogation) represents a significant achievement for the UK in meeting environmental objectives through EU-wide minimum rates of taxation on industrial uses of energy. Setting minimum rates for fuel in member states is an important principle for the efficient functioning of the single market, preventing states from taking action such as cutting duty rates below minimum levels, which might distort the market, and reducing the incentive for evasion or economically inefficient cross-border shopping. The EPD has also paved the way for having equivalents of the climate change levy in all member states, so that energy-intensive businesses contribute to their environmental costs, while the UK's competitiveness is protected."

Let's just dissect that. The UK applied to the EC for permission to levy a reduced tax rate and was ordered to go away and raise taxes. But this apparently does not represent a loss of tax sovereignty. Tax harmonisation reduces distortions in the market – yet it is increasing taxes in the UK, where flight training already costs twice as much as in some European countries and up to three times as much as in the United States. And the EDP protects the UK's competitiveness while raising the price of avgas to £1.70 a litre, compared to as little as 41p a litre for our competitors in Florida. Is it any wonder that Britons who want to be pilots take their money and their business elsewhere?

The UK Treasury knows the truth full well. In its application to the EC for a derogation it said in part: "The United Kingdom further explains the negative effects on both the private pleasure-flying sector and many small businesses associated with it. Furthermore, it would increase the cost of training which would grow the trend for pilots to train in the United States. In addition, removing the derogation would raise safety issues if users were tempted to put unleaded petrol rather than aviation gasoline. On the other hand, the United Kingdom points out the insignificant revenue gain and the small benefit in terms of carbon emission saved associated with introduction of the general tax treatment."

Mr Healey's letter concludes with a promise to work with general aviation to "explore the options for the most appropriate implementation". It's important to stress that the Treasury carries no blame here, apart from perhaps for Mr Healey's convoluted attempts to put the best gloss on the situation. There may be political advantages to pretending you're not being ordered around by the EC, but they look pretty lame when trotted out for those who have to pick up the tab. But the Treasury tried hard to have the derogation continued, and it sees the dangers for an already-beleaguered industry in applying the EC's diktat. In discussions with Treasury officials, Martin Robinson has been heartened by their willingness to seek a way forward that might help to protect the GA industry. They have been proactive in suggesting possible mitigation. Martin says: "I'm very grateful to them for the way they have listened to our case and have apparently been prepared to act to help us."

Chief executive's diary:

Anybody here been shafted and speaks English?

Meetings, meetings. Counting them up, I went to 70 meetings in the UK in the last year, and 18 in Europe. When I think of the hours and the effort that go into preparing for meetings, my heart quails. About 20 percent of meetings are now in Europe, and while you might think there are odd goings-on here in the UK, Europe has a special talent for throwing up off-the-wall situations.

Consider the EASA Working Group called M017 which is looking at the controlled maintenance environment under EASA's Implementing Rules on Maintenance. AOPA proposed Bill Taylor, chief executive of de Havilland Support, for that group. He's perfect for it – an engineer to his bootstraps, after years of working in Europe he knows the minutiae of EASA decision-making on maintenance back to front. But the job's gone to someone from the British Gliding Association, and Bill's been put on the M05 Group, which is looking at pilot maintenance. Horses for courses, eh?

That's nothing to what ICAO can come up with in Montreal. If sense does not prevail, every one of you is going to have to have a certificate to attest to the fact that you have a working knowledge of English, and it'll have to be renewed every three to six years. There may even be exams. Watch this space.

We've had a busy round of meetings since the last magazine came out. I was at

an EASA meeting in Cologne on January 23rd, when we again debated the persistent problems with EASA's financing. The EASA Advisory Body does not agree with proposals made in an independent report on how the fees and charges should be structured, and it's becoming clear the Agency has failed to invest in suitable IT equipment.

On the 25th I was the guest of NATS at the British Air Transport Association's annual dinner. NATS say they want to get closer to general aviation, and they invited me to the inaugural NATS – GA forum at Swanwick on the 29th. It's good to see they're taking an interest in us and have appointed Paul Loudon, their customer services director, as GA's focal point. We're going to have three meetings a year. You'll never guess what we discussed. Mode-S. I think they call it "a frank exchange of views". On the 30th Tom Horne, who's editor

On the 30th Tom Horne, who's editor of AOPA Pilot, came over on a factfinding mission. User fees are the only topic of conversation in the States, and he was here to see how they work in Europe. As Cessna's Jack Pelton says, they are one of the reasons European GA is where it is, while American GA is where it is. Don't do it, guys.

On February 1st we had a meeting of the new CAA Working Group that's come out of one of their airspace initiatives, the Airspace Education and Communications Programme. They say all GA pilots need re-educating on how to use airspace, in order to reduce infringements. We're agreed to look at what information exists already and how it could be improved. We're going to have possibly twelve meetings this year. On February 2nd I was at Gatwick for a CAA meeting to

discuss air traffic controllers and their level of understanding of GA. I'm told that of the 57 people in the last intake at the ATC training college, only six professed to have an interest in aviation. We're arranging to make GA material available to ATC students. Air traffic control can be a very lucrative career now, and we're beginning to see self-sponsored controllers coming through. At the top of the tree they can earn six-figure salaries, but they cost more to train than ATPLs – anything up to £500,000 each, it's said.

I had a meeting with classic jet owners on February 6th; they're considering forming an association, perhaps under the AOPA umbrella, to address their specific problems. On the 13th AOPA chairman George Done and I had lunch with Mike Bell, head of safety regulation, and Graham Forbes, head of flight crew licensing at the CAA, to discuss matters of mutual interest. They were pleased, they said, with the positive tone attached to our report of the CAA's GA Conference in *General Aviation*. Well, we always give credit where it's due, of course.

That evening I took the Robinson Roadshow to the Gloucester Strut of the PFA. I spend a while explaining AOPA,

Europe gets serious on GA

The European Commission's long-awaited paper on general aviation in Europe has finally been published, and marks a promising start on the long road to creating a positive environment for the industry across the continent.

The paper is the result of a meeting in Brussels a year ago between European Transport Commissioner Daniel Calleja and four AOPA staffers – UK CEO Martin Robinson, IAOPA president Phil Boyer, German managing director Dr Michael Erb and IAOPA secretary John Sheehan – at which general aviation in Europe was contrasted unfavourably with the industry in the United States. At that meeting Martin Robinson pointed out that European commissioners going back to Neil Kinnock had disclaimed responsibility for GA when tackled by AOPA, but Daniel Calleja was clearly open to new ideas that might help improve the industry's prospects. Robinson suggested that a start be made by making a study of GA in Europe in order to establish baseline data. Calleja agreed to dedicate some resources to this and directed one of his own staffers. Mikolaj Ratajczyk, to do the work.

The results of this work were published in February in a document called GA in the

then take questions, and it's usually well received. There was a good crowd at Gloucester, and I enjoyed the experience.

On the 15th we had the first meeting of the Light Aviation Aerodrome Study Group – Flying Training. This is a difficult one to call because, while there are obviously positive advantages to some of what's being discussed, we're being asked to sign up to a pig in a poke. There are too many questions that are answered with, "Oh, we'll sort that out later. Maybe I'm getting cynical, but I want to see apples and pastry when I'm promised apple pie. And when somebody says we can waive Rule 5 at unlicensed aerodromes, I want to see it in writing from ICAO. Let's wait to see what they come up with, then see how it can be made to work.

Next day we had an update at the Department for Transport on the Single European Sky, and on the 21st we had a meeting of the GA Strategic Forum, for which AOPA provides the secretariat and which is chaired by Mark Wilson of the BBGA. We're continuing discussions on the recommendations of the Strategic Review.

On the 23rd I went to the CAA's Finance Advisory Committee, where we're talking about the impact of the increased CAA charges as they enter their second year. It's always difficult to get hard statistics from the CAA. They say there's been a small increase in PPLs issued, but they don't say whether that includes the NPPL, or whether indeed it includes the first batch of people renewing their JAR PPLs after five years. They're applauding the fact that the number of professional licences issued is up, but what they don't say is that it's due to foreign licences being switched to the UK. When the likes of easyJet and Flybe European Community, and the subject was discussed at a conference in Brussels in March at which Martin Robinson was one of the speakers. As usual with the EC, time allowed for feedback was woefully short, and all comments had to be in by April 1st.

The contrast between Europe and America. which was what first caught Daniel Calleja's attention, was pointed up starkly by Martin Robinson in his address. AOPA estimates the value of GA to the US economy as \$103 billion (£54 billion); in the UK it is around $\pounds 1.4$ billion – and the UK is still one of Europe's most active GA nations. At best, Europe accounts for perhaps 20 or 30 percent of the US value. There was, he said, clearly room for growth, and with more than 11,000 jobs in the UK dependent on general aviation, the potential across Europe was massive. He warned whenever GA

regulations were mooted, there must be a cost-benefit analysis. Europe has yet to adopt the "better regulation" ethos of the UK, where regulation can be challenged if it is not for a demonstrable benefit, and the EC must embrace the principles

hire foreign pilots, they don't want to have to go home to Romania or Uzbekistan to revalidate their licences, so they're switching them to UK tickets. It gets the CAA's numbers up and it's a nice little earner for the Authority, but it doesn't mean the industry is doing more ATPL training here.

On the 27th we had the BBGA conference and dinner. The keynote speaker was Gillian Merron, the aviation minister, and in her speech she quoted from AOPA's General Aviation magazine. It really is read in high places, and it makes a great contribution by getting our message right to the top. On March 1st we had a second meeting

On March 1st we had a second meeting with the Treasury on the EC's fuel tax issue. There's a separate story on that topic in these pages, so suffice it to say I'm pleased with the Treasury's approach, and I understand their imperatives as they understand mine.

Next day we had a workshop at the CAA on the changeover from the JAA to EASA, which is now complete; there are still some orphan NPAs out there which need to be gathered in, but otherwise the JAA sleeps with the fishes. On the 3rd I was in Leicester for a meeting of AOPA's Members Working Group, a worthy body with a lot of good, solid ideas for improving your Association. A separate report of that also appears in this section. Afterwards I gave the Robinson Roadshow to a slightly smaller crowd than usual, but they were no less appreciative for that.

On March 7th I went to Brussels for a meeting with the European Business Aircraft Association to get our stories straight ahead of the meeting to launch the EC's GA paper the following day. We have a good relationship with Brian Humphreys and the EBAA, and we trade

of regulation testing if we are not to end up with bad law. Risk assessment must be a foundation of rulemaking, and industry consultation must be more than just a process to be got through. Regulations must be simple and user-friendly, consistently and fairly applied, and regulators must be accountable. The process has to be joined up - the recent EC decision on fuel tax, he said, had been taken in isolation by people who did not consider themselves accountable for the real-world results. Any regulation had to be targeted in order to minimise unwanted sideeffects. Above all, GA had to be looked on as an opportunity and its real value had to be recognised. As former FAA Adminsitrator James Busey pointed out, even if GA only did one thing - trained future airline pilots - it would be essential.

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Robinson described Ratajczyk's paper as "a good start" which was comprehensive and had been well-researched, but the paper itself bemoaned the lack of statistics on GA in much of Europe. It estimates there are 90,000 pilots engaged in "private powered flying" in Europe, using 20,000 aircraft and flying between three and four million hours a year. There are 40,000

microlight pilots, about 90,000 glider pilots and 22,000 gliders, 115,000 hang glider and paraglider pilots, 120,000 parachutists, and

information and adopt a common approach where it suits us.

We had the EC's paper on March 8th, as set out in a separate report here. I did a presentation on behalf of IAOPA, and we have since had some positive words from Transport Commissioner Daniel Calleja on the importance of GA to Europe. After the EC event I had a meeting with John Sheehan, general secretary of IAOPA, on matters coming out of ICAO.

On March 13th we had the GA Consultative Committee meeting, again covering a wide range of topics. An illustration of the difficulty we all have in keeping track of the skiploads of new regulatory proposals coming in every day from all over the world was the fact that the CAA hadn't heard that ICAO intends to make the carriage of ELTs compulsory for all aircraft by 2009, and PLBs will be unacceptable. If the CAA with all their resources can't keep track of everything, how much more difficult is it for AOPA?

That evening I did the Robinson Roadshow at West London Aero Club at White Waltham, and we got a large and enthusiastic turnout – it was nice to see the PFA chairman Roger Hopkinson there. My thanks to Chris Royle who arranged it. Then on the 15th we had the second meeting of the LAASG – Flying Training. The question remains the same – what's hiding under the blanket? We'll have to sit back and see what's proposed. So as the magazine goes to press I'm looking at meetings of the SES High Level Group and the ICB in Brussels, the DfT in London, the CAA at Gatwick – so guess what? News of more meetings next time!

Martin Robinson

5,300 balloon and airship pilots. The business jet fleet is picked out as the most dramatic growth area. Looking at rotorcraft, it manages unaccountably to ignore the world's biggest-selling helicopter, despite the fact that it is



expensive and less capable turbines in commercial operations, and lists Bell, Eurocopter, Agusta and Sikorsky as the "major players" in the market. It describes flight training as "a

increasingly shouldering out more

core of general aviation" which is "usually considered to be one of the important sources of qualified aviation staff for airlines". It states that the line between commercial air transport and general aviation is increasingly blurred, and clarification is needed as to what exactly is being regulated when GA is addressed. It describes GA as diverse, ranging from complex jets to recreational balloons, and listed some of the difficulties it faces – access to airfields and airspace, excessive provisions of the JARs, environmental issues. It concludes that more data is required, and invites responses and comments.

Right: trigger for action in Europe - Martin Robinson presents EC Transport Commissioner Daniel Calleja with his copy of General Aviation at an IAOPA meeting



Members push AOPA mentoring scheme

A proposal to create an ambitious mentoring scheme for private pilots has been put forward by the AOPA Members Working Group and is being worked on with a view to improving skills in such areas as instrument flying and navigation.

The idea, first raised at a meeting of the group at White Waltham last year, has been fleshed out and was discussed again at a meeting at Leicester early in March. While it would not yet be useful to set out all the details here – such schemes must always be tweaked on the road to fruition, and you can get bogged down debating detail that doesn't last the course – AOPA's chief executive Martin Robinson says he supports the proposal, which he described as sensible, practical and sustainable.

The prime movers behind the scheme are members Timothy Nathan and Steve Copeland, both high-time instrument rated pilots. The group believes the scheme can be constructed in such a way that it would require no regulatory control, either at the UK or European level. Group members are now working on details, and a draft proposal will be published here when they're ready.

Apart from Timothy Nathan and Steve Copeland, members at the meeting included Mike Cross, Pat Malone, John Yan, Mark Stock and Chris Royle, who chairs the group. AOPA representatives were Martin Robinson, chairman George Done, and Mandy Nelson, who runs the office part-time.

The group encompasses a vast range of flying experience. Timothy Nathan has thousands of hours on twins, Steve Copeland flies some 400 hours a year, an unusually high number for a PPL. Pat Malone was a helicopter instructor and Professor George Done was Dean of the Aeronautics Department at the City of London University. At the other end of the scale, John Yan has 14 hours total time and has just gone solo at BA Flying Club at Booker.

The Leicester meeting covered a lot of ground. Mark Stock, Head of Finance Operations at the London Stock Exchange, is working on strengthening and supporting the Wings scheme and gave a progress update. Promotional material is being rewritten and redesigned, and online application is to be made easier. AOPA member David Nickson, who was unable to get to the meeting, is involved in the rewriting.

The Members Working Group is also keen to set up a network of regional AOPA representatives involving a volunteer for each flying club or school. At present, AOPA



material is sent to CFIs of flying clubs who are corporate members of the Association, but they obviously have their own fish to fry and often don't have the time to devote to promotion and recruitment. The group is discussing the possibility of putting together such a network and providing representatives with material to help them represent AOPA, explain the Association, encourage membership and provide feedback.

Mark Stock has also been involved in the establishment of the new AOPA members forum at *www.joinaopa.com*, although much of the work has been done by Mike Cross. Launch of the forum has been delayed by a spam attack, but it's almost ready to go. At the same time, Peter Harris has been revamping the main AOPA site *www.aopa.co.uk*. The two now need to be linked, and the site needs to be populated with changing data as well as links to other relevant sites. Neil Monks, the former CAA man who now works part-time in the AOPA offices, is identifying archive material from the magazine with a view to having it uploaded onto the site.

Martin Robinson has been planning for some time to do a regular face-to-face question and answer session with members over a webcam. A few glitches remain to be sorted out.

Much time was devoted to discussing the mentoring scheme. Chairman George Done said that while there were clearly obstacles, none of them should be insurmountable. There was also likely to be opposition, such as there had been when AOPA created and pushed through the IMC rating. Over the years, those who said the rating would merely encourage pilots to fly in weather conditions beyond their abilities had been proved wrong, and many

Left: AOPA Members Working Group meeting in Leicester, from left, Mark Stock, Mandy Nelson, Martin Robinson, George Done, Chris Royle (chairman) John Yan, Timothy Nathan, Steve Copeland. Mike Cross and Pat Malone not in picture

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lives had been saved. The scheme is to be discussed at the AOPA Instructor Committee and the Corporate Members Group.

Discussions also ranged over the Instrument Rating – Steve Copeland is to represent AOPA on a CAA study group looking at possible changes to the IR ahead of European action – and Mode-S, where Martin Robinson said concessions were being sought, including a very long transition period, altitude limits, and the agreement of the CAA not to charge vast amounts of money for permission to do what we're being ordered to do. (See separate story in this issue).

Martin Robinson talked the meeting through the Implementing Rules on Maintenance, which is rapidly turning into another EASA pantomime. There seems to be little genuine will at EASA to resolve the problems, and the level of seriousness with which the Agency is treating the issue is illustrated by the fact that the study group looking at business jet maintenance is headed by an expert from the British Gliding Association. AOPA has asked EASA to provide a regulatory assessment showing where there will be a measured improvement in safety as a result of IR(M) but they have been unable to do so – it's a prime example of regulation for regulation's sake.

Martin also spoke of a meeting at the Treasury the previous week to discuss the EC's diktat on aviation fuel taxes. If Europe is indulged to the letter, the price of avgas will go up to $\pounds 1.70$ a litre and avtur will roughly double. While keen to hold down the cost increases, which it recognises would have a catastrophic effect on an industry that is already hopelessly uncompetitive against foreign competition, the government does not want to be seen to be supporting an unleaded fuel. The industry is trying to come up with a way of taking avgas out of its current tax coding and give it a separate identity as a specialist fuel, but we must first prove it is technically different from leaded motor fuel. The Treasury would then be able to set the duty on avgas at the EU minimum rate, which would mean a 1.5p or 2p rise. (See separate fuel story in this issue). ■

America warned against aping Europe's ways

Cessna chief executive Jack Pelton has used general aviation in Europe as a warning to America about how bad things can get when bureaucracy runs the show.

Pelton has attacked the FAA's proposal to impose user fees as a "bailout" for the airlines. User fees, he says, are "the major obstacle to continued success" in US GA. The example of Europe should deter the FAA from going down that road altogether, he suggests.

"After an intense lobbying campaign by the airlines, the FAA has proposed to radically change the way it is funded," Pelton says. "Instead of the stable, non-bureaucratic gas tax, the FAA is proposing to switch to user fees – the same method retarding the natural free-market growth in Europe we might otherwise expect to see given the dynamics of that economy. In Europe, the airlines rule the skies, shutting out other air travel alternatives."

Pelton painted a picture of declining general aviation growth, stifled overall domestic economic activity and reduced US economic competition internationally resulting from user fees.

He goes on: "What the FAA is proposing is to create a new bureaucracy to collect user fees, which they admit will bring in less than they get now, and would result in an unstable funding stream dependant on continued growth of the system."

"Instead of growing to meet the global demand and retaining our national leadership in general aviation, we will retreat and ultimately lose out to Japan, to Brazil, to Canada."

But not to Europe.

EASA takes on JAR-FCL

Many of you will know by now that the JAR-OPS and JAR-FCL work of the JAA was handed over to the European Aviation Safety Agency (EASA) on January 1st this year.

EASA is an agency of the EU, based in Cologne, Germany, and it has set up a number of working groups to handle the task of transferring JAR-OPS and JAR-FCL to EASA OPS and EASA FCL.

When the JAA first started its work on the JARs, the intention was they would become a Regulation. However, the structure of the JAA did not make this possible, and we ended up with Requirements. As such, these were not binding and sadly, although many of the JAA member states had been involved in formulating the JARs, every country tended to implement them in their own way. This has led to a disappointing period which has given rise to a lot of problems and complaints.

Now that the work has come under the EU we will have a Regulation, and both EASA OPS and FCL will be included in the EU Regulation

1592 which can be found on the EASA website www.easa.europa.eu

A core group was formed by EASA in August 2006 to oversee the licensing transfer, and four subgroups were set up to undertake the

drafting work:

- Subgroup for transfer of JARs.
- Subgroup for non-JAR aircraft

(gliders, airships and balloons).

Subgroup for medical.
Subgroup for outboritie

• Subgroup for authorities. I was invited to join the core group, and I

chose to sit on the 'transfer of JARs' subgroup representing the European Region of IAOPA. Basically, the actual JARs as we knew them

will not change, although they become Implementing Rules (IRs). Whereas we had different books under the JAA, i.e. JAR-FCL 1 Aeroplane and 2 Helicopter etc., there will only be one book which will also include Powered Lift (Tilt Rotors). The latter will not be included in the PPL section.

We are trying to maintain as much as

possible of JAR-FCL with a similar numbering system, but we are breaking things down into general, fixed wing and helicopter. This follows the layout of ICAO Annex 1.

The main document will include the Implementing Rules (IRs) i.e., the Regulation, and the detail will be in the AMCs (Acceptable Means of Compliance).

It is hoped that the result will be a more easily understood document, with none of the complex cross-referencing we have at present.

The significance of having Implementing Rules means that as this is a Regulation, there will be no more decisions left for National Authorities (CAAs) to take. The decisions will all come from EASA. Hence the expression "at the discretion of the Authority" will disappear from the document.

We hope to have the drafting work completed by July this year, but that is just the beginning of the process of becoming European Law. The date of July 2008 has been mentioned, but it will all depend upon the EU legal process and whether the document is subject to a 'second reading'.

– Pamela Campbell 🔳



Mode-S: don't panic, there's time

here is no more vexed debate in general aviation today than that of Mode-S transponders. It's one of the longest-running and most intractable problems the industry has faced – AOPA's chief executive Martin Robinson says Mode-S was being hotly debated when he first started working for AOPA 17 years ago. Since then the debate has barely moved on, with all sides shifting only marginally from entrenched positions.

While CAA chairman Sir Roy McNulty told the GA Conference in November that Mode-S was not a done deal, there have been signs that not all executives in the Authority share his viewpoint. Despite appeals to reason and pleas for alternatives, there are certainly some in the CAA who see Mode-S as the only solution.

AOPA's position has also changed little down the years; Mode-S is the wrong solution to the perceived problem of aircraft

AOPA

separation, it is technologically incapable of suiting all GA aircraft, it confers no benefits whatsoever on those who would be forced to pay for it, and it will have to be junked sooner rather than later when ADS-B or similar systems become available.

There are signs that those people at the CAA's Directorate of Airspace Policy who agree with AOPA's position are making their opposition felt - enough, at least, to introduce flexibility to the implementation of Mode-S. Original deadlines will pass unmet, exemptions will be made for many aircraft, and for places where Mode-S will be required. GA will be given five years to make the change.

But however flexible the CAA ends up being, it's difficult to foresee a future in which much of GA does not have to pass through a Mode-S phase on its way to better new systems. Martin Robinson says: "If I were buying an aircraft today, there's no question that I'd equip with Mode-S because in the long run it will

cost less that re-equipping later.

Mandating Mode-S for GA is solely for the benefit of airlines, who want access to regional airports through the Open FIR. Neither the airlines nor the CAA will be contributing to a re-equipment bill estimated at £30 million for UK GA. Indeed, thanks to the certification process the CAA stands to make a financial killing from giving us permission to do what they are ordering us to do. AOPA is aware of some instances where the CAA's approval fees have come to three times the cost of the actual transponder.

Martin Robinson says: "There are particular aircraft where aerial positioning

fees have come to

cost of the actual

three times the

transponder

is an issue because of signal shielding, others in which wiring issues and even the placement of the transponder itself is problematic. After two hours' work, a minor modification becomes a major modification and the fees rise exponentially. This is one of the major issues we have with the CAA - they must ameliorate their fees with regard to Mode-S.

The CAA was originally demanding that everything that flies, from balloons and gliders to homebuilts and Group A aircraft, be equipped with Mode-S transponders. But as it became clear that creating a self-contained transponder for low-generating or nonelectrical aircraft was easier said than done, a series of messy compromises was mooted. It now seems that many aircraft, like gliders, and microlights that remain in the circuit will be exempt from the Mode-S requirement. AOPA's calls for a concession of at least five years during which the use of Mode-C transponders will be allowed in Class D airspace is being sympathetically considered by the CAA. AOPA accepts that Mode-A will be discontinued, but upgrading from Mode-A to Mode-C can be done for about £200.

The five-year changeover, AOPA argues, is required for manufacturers to seriously address the technical and commercial difficulties surrounding the provision of lightweight, lowcost Mode-S units. During that time, not only will technology improve but prices should continue to decrease. AOPA also maintains that in Class G airspace below 6,000 feet there should be no mandate for a transponder, and again, that position is being sympathetically considered by some in the CAA. Robinson says: "In fact there would be so many Mode-S returns that ATC will be forced to filter them out outside controlled airspace anyway, and requiring expenditure on Mode-S transponders that nobody will ever see is particularly perverse. Two GA aircraft with Mode-S installed are no safer than two

unequipped aircraft, because unless they are receiving a radio the CAA's approval service they will have no information about each other.

The CAA is aware that it faces difficulties in satisfying the government's requirements when it comes to Mode-S. Under current "better regulation" guidelines, a regulatory impact

assessment is required to run a cost-benefit analysis on any mandate. With Mode-S, the cost to GA is £30 million, the benefit is diddlysquit.

The Authority will be launching a second round of consultation on Mode-S in the near future, and AOPA believes they will incorporate the five-year transition and other concessions in their planning, including specifying the aircraft which will be exempt from the requirements. Whatever you do about Mode-S, don't panic. The deadlines we were originally given have not been adhered to, and there's ample time to weigh your options. There is much confusion on this issue, even at the CAA, but equipping with Mode-S is certainly not required for VFR aircraft right now. The consultation process on the requirement for Mode-S for VFR traffic has not even been completed.

It was originally intended that after March 2003 all new IFR traffic was to be equipped

Left: newly-launched Garmin GTX328 costs

around £1600 and does the job



AOPA moves to soften the blows

AOPA is concluding an arrangement with Adams Aviation at Biggin Hill to provide members with Mode-S transponders at a substantial discount.

In addition, bearing in mind that Mode-A transponders are to be phased out while Mode-C transponders are likely to be accepted in Class D airspace for at least five more years, AOPA has also negotiated a discount on the (roughly) £200 cost of upgrading a Mode-A set to Mode-C.

The cheapest Mode-S unit available at the moment is the new Garmin GTX 328, a newlylaunched European-market derivative of the GTX 330 which has been so successful in the USA despite the fact that there is no looming

mandate there. American GA pilots have been falling over themselves to fit Mode-S because it works with TIS, or traffic information services, allowing them to pick up information on nearby aircraft, weather information and much more via their transponders.

In Europe the authorities have no intention of providing any such services, so a Mode-S box is no use to the buyer except as deadweight to comply with a regulation

The Garmin 330 costs upwards of \$5,000, but the 328 has a list price of \$2,995, or about £1,500. It is the result of an initiative by Garmin's UK head Steve Gubbins, who proposed a European model to Garmin in the US last year.

He says: "In the UK we're in a situation where people with perhaps a £15,000 hull value are being told to pay $\pounds 3 - \pounds 4,000$ for a

transponder, and they're not very happy. So in the 328 we've stripped out all the 330 features like extended squitter, TIS functions, enhanced surveillance and effectively reduced the classification from Class 1 to Class 2 Level 2S.³

The 328 does not have the wattage required to operate legally above FL170, but is more than enough for GA aircraft in the seven European states which are moving towards a Mode-S mandate.

Although it's impossible to know before the Authority decides on exemptions, Garmin's research indicates that some 23,000 GA aircraft will be affected by the Mode-S mandate in Europe, of which 9,000 are in the UK.

Adams Aviation and The Flying Shop have combined to introduce some Mode-S hotlines to advise pilots on requirements. Call 01959 579888 or email mode-s@flyingshop.com with any query on this vast and complex subject. There's a special number and email for fleet operators - 01959 579880 or mode-s@adamsaviation.com.

with Mode-S. By 2005, all IFT and all new VFR aircraft were to carry it, and by 2007 everything that flew was subject to the requirement. The deadlines have slipped, and will slip further. The CAA has agreed that AIC 49/2005 is misleading or ambiguous, and it will be rewritten after the upcoming round of consultation to take account of changing circumstances.

AOPA member Don Wallace, whose group operates a Mode-C equipped Tobago out of

Bristol, contacted Martin Robinson in February pointing out that if the law were to be applied to the letter, shooting an ILS into Bristol would be illegal after March 31st this year unless the aircraft were Mode-S equipped. His group, he said, was being inundated with information from Mode-S installers claiming it was required now.

Martin Robinson replied that there was no doubt the Mode-S mandate represented the biggest windfall for the avionics companies since FM immunity, and that he had been forced to contact some installers to point out that their claims were misleading. He said it should be possible to continue flying in Bristol's Class D airspace for at least five years with Mode-C. Same goes for Class D elsewhere. As a result of Mr Wallace's questions to AOPA the CAA has contacted Bristol to clarify the situation, and if anyone finds themselves in a similar situation, please let AOPA know. ■

Beginners start here

A 'primary radar' is the great big rotating dish that fires out a radio beam and collects the returns that bounce off any aircraft, displaying them as blips on a screen. It's pre-war technology and it can easily get cluttered up with flocks of birds or weather phenomena, so the advent of the transponder (or SSR – secondary surveillance radar) was a Great Leap Forward.

A Mode-A transponder in an aircraft picks up the primary radar beam and bounces it back encoded with a four-digit number entered into the transponder by the pilot. That number, the 'squawk', appears next to the blip on the radar screen.

A Mode-C transponder also encodes the aircraft's altitude into the return signal, so ATC knows what level you're flying at. This means the controller no longer simply assumes a return is underneath controlled

airspace, he (or she) can actually see that it is (or isn't). At the risk of sounding Pythonesque, there is NO Mode-B!

A Mode-A transponder can be turned into a Mode-C transponder with the expenditure of about £200, but a Mode-S transponder is a different kettle of fish. It works on a different frequency (the powers-that-be say that they've run out of codes, there being only 4,096 available, so they need Mode-S because instead of a code the aircraft's registration appears on the screen.) You cannot turn a Mode-C into a Mode-S; you have to buy a new one.

Mode-S can be picked up by the collision avoidance systems (TCAS) in sophisticated aircraft. So can Mode-C, but where TCAS can pin a Mode-C return down to plus or minus 200 feet, that becomes plus or minus 50 feet with Mode-S. The CAA says that's important, but a study of Mode-C and Mode-S equipped aircraft by the Massachusetts Institute of Technology several years ago found it made no difference to the workload of ATC.

The way of the future?

Elsewhere in the world a different system, ADS-B, is being looked on as a solution to the problems the CAA say must be solved by Mode-S.

ADS-B (Automatic Dependent Surveillance – Broadcast) allows aircraft to communicate with each other as well as with ground stations, and can display the relative positions of all equipped aircraft to each other. In addition, through a bolt-on called 'extended squitter' it can uplink data on everything from weather to airfield information to Notams to the ante-post prices at Lingfield.

ADS-B shows up radar for what it is – prewar technology that has been overtaken by progress. ADS-B does not rely on a mighty ground station flinging a radar beam in all directions and deriving information from whatever it bounces off. It is simply a box that talks to other boxes. There is no requirement to tune out clutter. Air traffic controllers can access far more information via ADS-B without the need for radio communication, with less requirement for additional radio frequencies. And of course, it is an information superhighway for data reaching the pilot.

Importantly, ADS-B is cheaper than primary radar. A radar ground station can cost tens of millions of dollars, whereas an ADS-B ground station currently costs about \$250,000. Even taking account of the fact that you need more ADS-B stations to provide data uplinks, the

infrastructure costs are far less. Vested interests who make and sell radar systems are not keen on ADS-B.

In the United States, the airlines operate on

Mode-S while general aviation is likely to choose ADS-B as its preferred option. As radar can also receive an ADS-B signal, the two systems run in parallel and air traffic controllers are unaware of whether they are receiving an ADS-B signal or a Mode-S return – the information is the same.

The CAA says ADS-B is not robust enough in the core area of Europe, despite the fact that it has been in operation in Alaska for almost 12 years and many glitches have been ironed out. It is seen as the way of the future in America, in Australia, and increasingly in other parts of the world. At the CAA Conference on General Aviation in November, a CAA spokesman said authorities elsewhere in the world didn't always get things right, so the fact that they were moving towards ADS-B was of little consequence.

ADS-B equipment in the USA is based on a universal access

transceiver (UAT) which rebroadcasts a GPS signal, and until Europe gets its own Galileo satellite network the authorities here will not give their

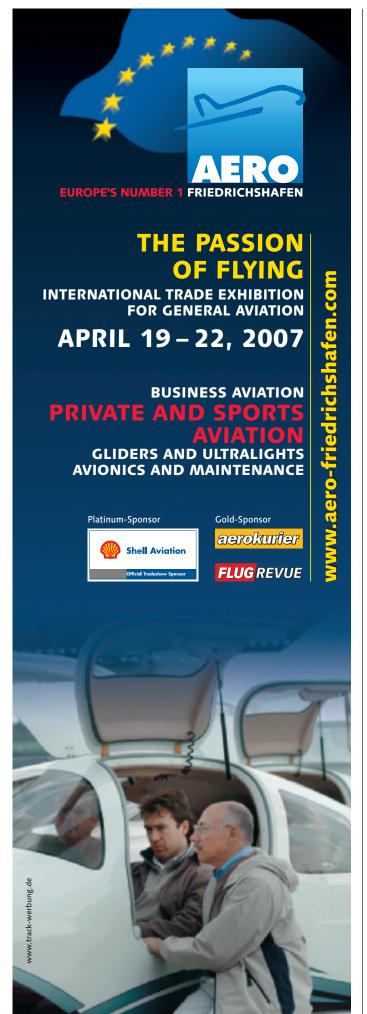
blessing to a system that relies on satellites operated by the American military.

Furthermore, the military in Britain will not allow old-fashioned radar to be taken out of use for reasons of security. It is not satisfied that satellites (especially someone else's) are robust enough to withstand solar flares, Chinese missiles or other troublesome phenomena – including the GPS jamming systems that are currently being manufactured clandestinely to confuse road-pricing systems in the UK.



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ta uplinks, the ADS-B equipment Vested interests who make and sell radar systems are not keen on ADS-B



Colour blindness

The saga of the greenfield-brownfield site debate grinds on, with some saying it's a lot of fuss about nothing and others seeing a Trojan horse full of rapacious developers.

In a footnote, old planning guidelines to local authorities used hospitals and airfields as examples of sites which, although partly developed, might not be considered as wholly suitable for development – brownfield sites, in the modern argot. New guidelines omit these specific examples. When the draft guidelines were published AOPA was told the omission was "a slip of the pen", but despite assurances the reference to airfields was not included in the final version.

The government claims the airfield example in the original guidelines was purely that – an example – and did not of itself safeguard any airfields, therefore it's removal does not remove any safeguard. The situation remains as before.

In a letter to Lord Rotherwick, president of the GAAC, planning minister Baroness Andrews says: "The footnote in previous PPG3 policy (the old guidelines) referred to circumstances where a building occupied only a small proportion of a previously-developed site, and the remainder was open land, then it would not normally be appropriate to develop to the boundary of the site... neither PPG3 nor its successor PPS3 specifically exempt airfields from development. However... PPS3 does include a clear



statement that there is no presumption that previously-developed land is necessarily suitable for housing development, nor that the whole of the curtilage should be developed. "PPG13, published in 2001, sets out the national planning

framework for transport, and includes advice on how local planning authorities should take account of aviation interests in preparing local plan policies and determining planning applications. In particular, paragraph 6 of Annex B of PPG13 states that local authorities should

• identify and where appropriate protect sites and surface access routes, both existing and potential (including disused sites) which could help to enhance aviation infrastructure serving the regional and local area; and

 avoid development at or close to an airport or airfield development that would be incompatible with any existing or potential aviation operations.

"So PPS13 makes clear that local planning authorities need to consider, in allocating sites in their plans, the potential of existing and potential airfield sites (including disused sites) for aviation purposes, alongside any other planning considerations for reusing the site for a different purpose, such as whether the site would be suitable for housing under PPS3"

8.33 kHz above FL195

On March 15th it became mandatory to carry an 8.33 kHz radio when flying above FL195.

The mandate applies to the entire ICAO European Region. Eurocontrol said the date had passed without incident, and that awareness of the need to carry 8.33 above that level seemed to be high. A programme of ground radio conversions is under way.

Up-to-date information on 8.33 kHz above FL195, including the planned frequency conversions, is available at *www.eurocontrol. int/vhf833/public/standardpage/VerticalExpansion.html*



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