

The Future of Aviation
The Government's Consultation Document on Air Transport Policy

Response

The respondent is the holder of a Private Pilot's Licence with IMC and Night rating privileges. I am based at Newcastle International Airport, and fly both club and privately owned aeroplanes. I use my licence for pleasure and as a means of transport in connection with my work. I am formerly a director and Secretary of the Newcastle upon Tyne Aero Club; one of the oldest and largest Aero Clubs in the country, with around 850 members and 100 students at any one time. This response will therefore be presented from the point of view of someone involved in General Aviation.

1. The Government's central premise has been one of an integrated transport policy, and that the government is now considering aviation in this context must be welcomed.
2. **Environmental Effects from Exhaust.** The piston powered GA fleet in the UK burns a miniscule amount of fuel in comparison with the turbine fleet, so the impact on the environment from this activity is very small. Taxation on Avgas is already much higher than on Jet fuel, so there would be considerable incentive for GA owners to move to more fuel efficient engines were they available. However the cost of development and certification is a significant barrier to such innovation in the certified fleet. In the "permit" and microlight fleet however, with a regulation regime more responsive to innovation, significant developments have and will continue to take place, with fuel economy in both petrol and soon in diesel engines improving substantially. The new Wilksch diesel (www.Wilksch.com) is a good example of the way in which the PFA permit scheme has allowed such innovation in the UK.

Recommendation: Attention should be given to ensuring that the full certification of such engines, and other innovations which will modernise the technology in the GA fleet, to CAA / JAA / FAA requirements is as simple and cost-effective as possible, within the bounds of safety.

3. **Environmental Effects from Noise.** Noise is quite clearly an issue for those who live and work close to aerodromes, and under regularly used flight paths into and away from these aerodromes. These comments are confined to noise created by GA movements, whether into airports like Newcastle, or smaller airports, or indeed into farm strips. There are two main sources of noise from GA fixed-wing operations: the exhaust and the propeller, plus the noise from the reciprocating engine itself. Both can be mitigated substantially by use of a combination of new technology and silencing techniques. Once again the PFA fleet has been a leader here with the use of water cooled engines (providing a silencing water blanket around the engine); three blade propellers which reduce prop tip speed and effective gas-flow enhancing exhausts. These have been developed and implemented safely in the PFA community. A good example here is the British designed Europa which is so quiet flying overhead that the last one I heard was drowned out by a bus going past.

There are similar propeller and exhaust technologies available to the certified fleet, but once again the certification costs are high. It is disappointing that, so far as I understand, the CAA has not accepted directly the certification on these devices from other European authorities. The exhaust silencers from Gomolzig in Germany are a good example. These must all be certified in the UK before they can be used, despite being already safely fitted to many aeroplanes in Germany. The result is that the small number of new aeroplanes that are sold each year are mostly not fitted with silencers, and there is substantial disincentive to replace existing equipment with quieter technology on older planes. An exception to this is the new Diamond Katana and Star range of aeroplanes which have been designed in Austria and are very quiet.

Recommendation: Priority should be given to allowing newer quieter technologies to be certified at low cost, especially where the safety implications of their fitting to existing aircraft are minimal.

4. **Airports - London.** Quite clearly the use of airports like Heathrow and Gatwick by most GA traffic is difficult. However there are alternatives in the London, particularly Biggin Hill and Farnborough. It is to be regretted that access to London City is effectively cost limited against most GA traffic. Meigs Field in Chicago, IL, USA, and Toronto Island Airport in Canada are good examples of “downtown” airfields where GA and scheduled flights mix effectively. The immediate approaches to both these fields are over water, but in common with London City there are tall buildings in the immediate vicinity: indeed Toronto has one of the tallest buildings in the world nearby, and Meigs had the tallest tower block in the world within 2 miles until not many years ago. (On a separate note the encouragement of services into London City from the North-East of England could be beneficial to the economy of the North-East.)

Thus London seems reasonably well served at present by GA airfields, although transport links between Biggin Hill and the public transport system, particularly the railway service into central London could be better.

I personally use Fairoaks since it is only a 10 minute taxi ride from the excellent SW trains service from Woking. It takes me about the same time from landing myself at Fairoaks to arriving in the City of London as it does arriving at Heathrow in a commercial flight and getting to the City. However, unlike Biggin and Farnborough, Fairoaks has no instrument approach and therefore a diversion plan into one of these two fields must be planned if IMC conditions are encountered. The use of GPS approached is discussed below.

5. **Airfields – Planning.** As described above small airfields like Fairoaks, Elstree and Denham play a part in the transport infrastructure that is wider than the remit of the local councils under whose planning jurisdiction they fall.

In the context of a national plan for integrated transport it seems extraordinary that airfields such as those described above do not seem to feature in the DETR’s planning process. In response to an enquiry I made about Rochester aerodrome, I was told by a DETR official that the existence, encouragement or closure of such airfields was a matter for the local council. Yet the construction of a new trunk road, or maybe even railway line, is a matter for the DETR not the local council through whose area this vital part of transport infrastructure runs.

To take Fairoaks for example. The residents of Woking and Chobham will have understandable concerns over noise and safety. These are the people who vote for the councillors who will decide issues relating to Fairoaks airport. Unless these voters have interests directly related to aviation, or take a principled view that having an airport is good for the area, then it will be in their interest to close or restrict that airport for noise reasons, or because (as I the case at Rochester or Ipswich) the council believes it can make more money from selling the land than it can from running the airport. Yet closure or restriction of these airports has an effect on the national transport infrastructure.

Recommendation: That any proposal by a planning authority to restrict or close an established airfield, whether licensed or not, should be subject to a similar process to that invoked if a railway line is proposed for closure.

South Cambridgeshire Council attempted recently in its structure plan to severely limit operations at airfields in its jurisdiction. This resulted in costly and time-consuming enquiries at which ultimately the Council lost. It is instructive that council decisions on airfields are more often turned down, and then more often overturned at appeals and public enquiries, than almost any

other class of planning application. This suggests that in some cases local councils are simply not competent on this issue, or are too easily swayed by small groups of lobbyists.

Recommendation: That planning guidance to local councils in respect of airfields should be strengthened to ensure that sound decisions are made without the need for expensive appeals.

6. **Airports – costs.** Many regional airports are now charging high landing fees, and often adding on excessive handling charges. For example Newcastle recently adding a mandatory £30 handling charge. This has the effect of actively discouraging GA. While it can not be reasonable to be charged for receiving a service, the costs that are being levied at some places effectively deny access. One can sympathise with this where the airport is operating at or close to full capacity, but at those which can fit in GA traffic it seems unnecessary. For example to land and park a Beech Baron at Teesside costs around £30 for 24 hours. The equivalent at Newcastle is now £100 or so. Although Newcastle is busier than Teesside, it has no problem fitting in GA traffic at almost any time of day.

Other airports which have taken to this level of charging include Aberdeen, Edinburgh, and Glasgow and Luton. In all but the last of these cases there is no convenient GA alternative. This is an extraordinary contrast with the USA where landing fees are the exception rather than the rule (the revenue of the airfield being provided by fuel, maintenance, hangarage etc.) Meigs Field in Chicago, for example, whose nearest UK equivalent is London City, charges around £15 for landing and parking for 4 hours. London City, were one allowed in with the appropriate operating procedures described in the pilot operators manual, would cost in the region of £400. This does not contribute to an integrated national transport infrastructure.

While it could be argued that “if one can afford to fly a plane then one can afford the landing fees” this is not the case. It costs around £75 an hour to fly a club plane. Thus a flight from Aberdeen to Newcastle and return costs around £225; the addition of £70 for landing and parking is a substantial proportion of the cost.

Recommendation: Investigate whether there is adequate economic regulation for the charging structure for using GA facilities at regional airports.

Airports – GPS approaches. The experimentation with approved GPS approaches is to be welcomed; as the technology becomes more and more reliable this could add many airports, like Fair Oaks above to the list of fields where IMC would not disbar a plane from this airspace. This should be encouraged.

7. **Airspace – access to airspace.** There are a number of areas of controlled airspace, most notably that part of the Manchester CTA which is Class D, and the Stansted CTR, through which it is almost always impossible to obtain a VFR clearance, and frequently not possible to obtain an IFR clearance. This is a matter for DAP, and I welcome DAP’s new role in this respect as regulator.

I have been unable to ascertain, particularly in respect of Stansted, why I am consistently denied a crossing clearance. The reason must be because either:

- a. the airspace itself is, quite literally, at capacity, in which case I do not wish to be cleared into that airspace since it would be dangerous for all concerned; or
- b. the airspace itself is not at capacity, but the controllers are. This would be an economic problem (i.e. the CTR/CTA needs more controllers) rather than a geographical one; or
- c. there is a general agreement, whether formal or informal, and if informal whether articulated or not, that GA VFR and to an extent IFR crossing traffic is not desirable in a CTR and will therefore be denied access.

If b. above is the reason for this denial then it is reasonable to assume that the problem will become worse under the NATS PPP scheme since the licensee will be looking for ways to cut costs. The recent withdrawal of LARS from Luton is an example.

Recommendation: That DAP be encouraged to use its new role as regulator to ensure that all airspace users are accorded equal access to airspace consistent with the safe operation of that airspace, and to ensure that economic considerations are never used as a reason to deny access to airspace.

Airspace – Air Traffic Services Outside Controlled Airspace. (ATSOCAS) The Lower Airspace Radar Service (LARS) where provided is a substantial contributor to flight safety and mitigator of congestion in controlled airspace for the following reasons:

- a. It allows the safe conduct of VFR and IFR flights in the region of controlled airspace and away from it, providing positive radar based information or advice, promoting separation from other airspace users, and enhancing flight safety and pilot's situational awareness as a result. Many of the users of ATSOAS are single pilots of fixed wing and rotary wing aircraft whose lookout is of primary importance, yet is one of a series of complex tasks which the pilot is required to undertake. Anything which reduces this workload and enhances situational awareness is good for flight safety.
- b. It can substantially reduce airspace infringements, especially in congested areas. For example the corridor between Luton and Stansted is narrow and confined in altitude as well. Although there are radio aids at each end of the corridor the existence of a radar service can be very helpful. For example I was, on one occasion, flying north from Biggin Hill. The wind was stronger than forecast, and my track had drifted to the east by a mile. I would probably have corrected this before infringement had taken place, but a timely warning from Luton LARS had me back on track before the drift had even become an item of interest to the Stansted controllers.
- c. The existence of a robust LARS allows some flights, whether commercial or GA to be conducted outside controlled airspace, thereby reducing pressure on airways.
- d. The existence of LARS allows police, ambulance, traffic advisory, and pipeline inspection aircraft to operate in all areas safely.

In short, LARS is not an optional extra to our airspace system, but an essential part of a policy of having safe skies. It has been argued that one of the difficulties in providing greater LARS cover is that traffic under certain weights do not pay Euro control charges. While this is true, it should be remembered that most flights which do pay these charges are turbine powered, and therefore pay little tax on their fuel. Piston powered aircraft, which form the majority of non-military movements outside controlled airspace pay much higher tax on Avgas; equated in my case to around 20 per mile.

Recommendation: That the LARS service is extended, and especially in the South East, urgent consideration is given to establishing extra controller positions to provide a LARS service around London.

- 8. General Aviation / Pilot Training.** The introduction of the JAR-FCL has had a huge impact on the GA community; on instructors, examiners and pilots. The cost of compliance is high and has become a barrier to people learning to fly, since it has increased the cost of instructors, thereby increasing the cost of instruction.

It is disappointing that the UK has been one of the earliest countries to implement JAR-FCL, yet the reciprocity we have been promised from colleagues in Europe has not emerged. There has therefore been no definable benefit from JAR-FCL.

There is no doubt about the importance of aviation to our national economy; and this depends, rather obviously, on a supply of pilots. The larger airlines can afford to put their trainees through institutions like the Oxford Air Training School, but smaller airlines, like Gill based in Newcastle can not afford this expense. If regional airlines are to be encouraged, then the supply of pilots for these airlines needs to be encouraged.

The proposed National PPL may be a step in the right direction, but it needs more than this. We need to return to the attitude that general aviation was a useful contributor, supported by the public, rather than something which was a rich person's hobby and of no interest or use to the majority. This used to be called "air-mindedness." The Government would do well to encourage it.

Recommendation: That arrangements be made for some kind of instructors rating to be added to the National PPL, or an alternative form of Instructor Rating be created in order to improve the dwindling supply of instructors.

Recommendation: That other JAA states be pressed to accept JAA issued licences in accordance with the "promise" of JAR-FCL

9. **General Aviation / Airfields.** I have already written about airfields, but would reiterate the need to make sure that GA airfields are accessible to everything from the corporate Citation or Learjet, through Richard Noble's new F1, to the small 4-seat piston plane.
10. **General Aviation / Radio Telephony.** The recent FM-Immunity requirements have added considerable cost to IMC flying in the UK. While the addition of a £3,000 radio is not substantial in the context of, say an ATR42 or Dash-8, but in the case of one of the planes in which I fly it is huge. A full FM immune upgrade will cost about £3,500: a disproportionate cost compared with the £23,000 resale value of the plane. The imposition of the requirements had been delayed in order to mitigate this situation, which was to be welcomed.

New requirements will be the Mode-S SSR and 8.33 kHz spacing on radio. The former should not become a requirement for GA aircraft, perhaps except in Class A & B airspace. It is not needed in Class D or E and should not be imposed.

8.33kHz may be unavoidable, but again it would help if its imposition in lower and middle airspace was planned such that low level airport and en-route frequencies were kept on the existing spacing for as long as possible.

Recommendation: That the imposition of new radio requirements for the GA fleet should be delayed as long as possible, and the cost / benefit analysis of doing so should be considered in the context of the value of the fleet into which the radios need to be fitted.

11. **Regulation:** The CAA does its best in the context of a regulatory regime which for the most part is more onerous than, for example the FAA. Unlike the FAA, the CAA must meet all its costs. Yet in the UK we do not, for example, seek to recover the entire cost of road building through the vehicle excise duty. We should look at ways in which the regulatory regime could be changed to provide a truly integrated transport infrastructure. The nation may need to recognise that there is a cost involved with this. GA serves everyone; through police and air ambulances, through traffic reports and pipeline inspections, through training pilots for the airlines, and through employment and other economic benefits due to the spend in GA by aircraft owners and operators.

Recommendation: We should question whether the model of full cost recovery for the CAA's operations in respect of the infrastructure and crew licensing genuinely serves the needs of a country with an integrated transport policy.

12. **Summary.** We need national attitudes to GA to change; and this can start at the DETR. The Department should provide a strong lead in
- a. promoting the benefits of aviation,
 - b. ensuring the continued existence of affordable airfields, and
 - c. relaxing the extent of regulation in the industry to the extent that this is conversant with safety, thereby stimulating technological innovation and modernisation in the industry.

Adrian P Beney
PPL with Night and IMC ratings
Durham.