

# Death by numbers

*Economist Ian Harnett uses the CAA's own figures to gauge the health of general aviation in a new way*

**L**ies, damned lies and statistics'... in this article we look at the CAA's data in order to highlight the key trends that are developing in UK general aviation as it responds to the pressures created by the changing CAA and European regulatory environment.

First the good news. The CAA G-INFO register shows that in 2004 – the latest data available – UK registered aircraft reached 17,012, up 73% since 1985.

However, the fastest growing area within GA has been microlights, hang-gliders and SLMGs. These now account for almost 24% of all UK registered aircraft, compared to just 17% back in the mid 1980s. This suggests

also a worrying feature of the data. Almost 60% of PPLs are aged between 38 and 60. The only encouraging trend is that there are a much higher proportion of female PPLs in their 20s and 30s.

One reason why UK registered aircraft and PPLs might not have been rising could be a shift towards Foreign Registered Aircraft (FRAs) and FAA aircrew licences as the UK/EU environment for GA has deteriorated. The 2005 DfT consultation paper on this subject suggested that they thought there were some 500-1,500 FRAs in the UK, which would cost some £0.25m in TOTAL to re-register. However, the UK aircraft spotters group LAAS International are able to give a much more



that as the costs of flying conventional GA aircraft have risen, pilots have found cheaper ways of getting airborne.

The fast take-up of microlights, however, is nothing compared to the dramatic growth in the number of airliners. These have shown growth rates of over 60% per decade since 1985. What is clear looking at the past two decades is that although the mid-1980s to mid-90s saw healthy GA growth rates (43% growth in registrations for aircraft below 750kg, for example), since the mid-1990s this growth has stalled almost completely (just 13% growth in 10 years). Air-taxi type aircraft in the 5701 kg – 15,000 kg weight range have actually seen their numbers fall by 9% over the same period.

The trends for aircrew are similar: back in 1992-93 PPL issuance (just under 4,000 per year) was almost double that of CPL issuance (just over 2,000 per year). However, the growth of airlines and pressures on PPL flying has meant that in 2004-5 CPL issuance was 65% higher than in the early '90s at just over 3,400, while PPL issuance is now below that of CPLs at about 3,200 (some 17% lower than the early 1990s). This PPL total also includes NPPLs – which bought forth an initial burst of enthusiasm but has now slowed to just over 800 in 2004-5 from almost 1,200 issued in 2003-4.

If NPPLs are excluded from the licence totals, then full PPLs have declined to just 2,329 in 2004-5 from 3,996 in 1997-8 – a decline of over 40% in less than a decade! Clearly, something has been driving people away from fulfilling an interest in aviation.

The age profile of the PPL pilot population is

accurate figure of 1,285 FRAs as of September 2005 (just over 800 of which are N-registered). A detailed analysis of the aircraft listed shows that approximately 800 of the total FRA fleet are GA aircraft, 151 were helicopters, and 132 were biz-jets – more than the total number of biz-jets on the UK register! However, the listing also shows at least 200 of this total are stored, in museums, or used as fire training aircraft, ie non-flyable.

The DfT explicitly stated that 'no significant safety issues have come to light in relation to...the US, Bermudan and Cayman Islands registers'. Also, the 26 EASA registers are also presumably 'safe' since the UK has signed-up to the EASA standards. The 'unacceptable risk' from foreign registers rather dramatically highlighted in the DfT paper, therefore, probably relates to fewer than 60 flyable aircraft!

Perhaps more surprising is that the number of FAA licence holders. According to the FAA Airman's Register (accessed via [www.landings.com](http://www.landings.com)) there are some 14,752 UK-based license holders, of which 1,342 are PPL/IRs. There are also 2,833 CPLs, 638 ATPLs and also 1639 A&P mechanics registered.

Given these figures, the estimates for the total cost of re-registering the UK FRA fleet would probably be closer to £15m – even if this was restricted to just GA aircraft and helicopters. If biz-jets were included as well, then the cost could rise to £20m-£25m. On the aircrew licensing side, if all UK based FAA PPL/IR pilots were to re-train and secure equivalent JAA ratings it would cost some £13m!

Despite some FRA activity replacing CAA regulated activity, the evidence from the airfield movement data recorded by the CAA shows that even with this boost, UK GA activity is far from healthy. While Commercial Air Transport (CAT) activity has more than doubled since 1976 (to 3.6m movements in 2004), General Aviation (private and aeroclub) movements at the 60 airfields recorded by the CAA has remained static at around 830,000 movements. Indeed, since its peak in 1990 at 1.2m movements, the CAA data show GA activity has fallen by some 31%.

Indeed, GA has been squeezed substantially, falling from almost 42% of total recorded



*Above: Self-launching motor gliders and microlights have multiplied in number as use of traditional GA types has stagnated – but commercial air transport has outstripped them all, rocketing by 60 percent per decade since 1985*

movements in 1976 to just 23% in 2004. More detailed data available for individual airfields since 1997 shows that the 10 most GA friendly airfields in '97 have seen GA activity fall by an average of 23%.

If we only examine private aircraft movements, then the decline is even greater. The 10 busiest airfields for private aircraft (which all had more than 10,000 movements in 1997) saw an average decline of -46% in private aircraft activity by 2004, with Stansted and Luton seeing declines of over 90% and even airfields such as Biggin Hill and Shoreham seeing declines of 54% and 63% respectively.

With the current plans from the Department

of the Deputy Prime Minister to allow "brownfield sites" such as airfields to be used for housing re-development, there is also clear pressure towards fewer airfields being open for GA use due to closure as well. Indeed, more than 40 UK airfields have closed since 1985 (many of which were large enough to have had ICAO identifiers).

Despite these trends and the fact that much of GA makes little profit, the revised CAA charging scheme devised by the JRT Review will see GA's costs increasing and BA's SRG charges drop by almost £13m over the next three years, and £7m a year thereafter. At the time when BA and the airlines pushed the CAA

to remove these "cross-subsidies" from the CAA charging schemes total operating profits for UK airlines reached almost £1bn in 2004-5 (the highest level since 1995-6), while those of BA reached £551m, back to levels last seen in 1996-7.

### So... what does all this mean to me as an AOPA member?

The CAA data paint a pretty depressing picture of the current state of UK general aviation. While the number of aircraft on the UK register is rising, it tends to be the smaller, cheaper means of getting airborne that are increasing in popularity, while traditional GA singles and

twins numbers are broadly static – even including those on foreign registers.

The most worrying trends are those relating to the number of full PPL licences being issued. The 40% decline in full PPLs in the last decade suggests that a whole generation has failed to be persuaded that flying is something that they can aspire to, enjoy and afford. Helping a new generation of young pilots into the skies should be an increasing priority for each of us.

Add to this the dramatic decline in airfield movements and the effective closing of several previously GA friendly sites to GA aircraft and the picture worsens. With the proposed changes in planning regulations the scope for seeing fewer airfields available for GA to use is increasing.

Against this backdrop for UK general aviation, the commercial aviation sector has been thriving, squeezing GA out of airports and airspace in the UK. The CAA has been a willing conspirator, through a range of measures including the relative reduction in CAT charges and the expansion of controlled airspace.

Sadly few people in the CAA, government, or even the GA community themselves are aware of the trends revealed in the CAA statistics. In the US, by comparison, there is an annual survey of GA and Air Taxi activity which provides a comprehensive set of data to examine trends in GA activity and usage, VFR



Left: the 132 foreign-registered corporate jets in the UK outnumber the domestic fleet  
Below left: The 26 EASA registers must be presumed to pose no extra safety risk  
Below: even with foreign registry, the number of GA twins has stagnated



## The search for meaning

By Martin Robinson

Ian Harnett has done a fantastic job of collating and analysing the figures which show just how much trouble general aviation is in. Many of these statistics are the CAA's own, yet the Authority does not analyse them and is apparently blind to the true situation, continuing to pile new financial burdens onto GA while rebating the money to hugely profitable and largely tax-exempt airlines.

But the statistic has not yet been written that does not need to be handled with oven gloves, and a number of caveats go with Ian's figures. While the number of airfield movements is massively down, the number of GA hours flown is relatively constant at about 1.1 million hours, according to CAA statistics extrapolated from C of A returns on engine hours. The inference is that

established airfields are losing traffic to farm strips, while those people who own aircraft may be using them more in order to sweat the asset. There may be other reasons. If more people are using farm strips, they're not doing as much circuit training as they once did, which could affect safety.

In the instruction field, with each student doing an average of 57 hours during a PPL course, a drop in the number of PPLs from 4,000 to 2,500 obviously means a major revenue shortfall for flying schools.

The total number of aircraft on the G-register can also be misleading. AOPA has established that fully 39 percent of registered aircraft under 5,700 kg do not have a valid Certificate of Airworthiness or Permit to Fly. This brings the number of active GA aircraft to under 10,000, and the number of Permit aircraft to fewer than 1,800. In the homebuilt arena this is partly a reflection of the number of aircraft that are registered in the early stages but never

completed. In the Commercial Air Transport sector, some 23 percent of aircraft on the register have no C of A.

The single most important figure Ian has put forward is the 40 percent drop in the number of PPL issues over ten years. This is not just the CAA's fault, although it must take a major share of the blame. Its financial depredations are raising barriers to entry when we should be trying to lower them. People have more money and more leisure time than ever before, yet we are chasing them away from aviation with cost and regulation. In terms of hassle factor, would you buy an aeroplane or a boat?

But we should not be groping for meaning in these figures, like medieval necromancers consulting the entrails of a chicken. We should know what they mean. The CAA has a responsibility to foster the financial health of the Commercial Air Transport sector – it would be in default if it had the same responsibility to GA. The industry must tackle the underlying problems, and the CAA must help. Heaven knows, we pay them enough.



and IFR, which are constantly examined by policy makers and pilots – determined to ensure that both commercial and GA flying thrives.

Here in the UK, however, policy is being made in an environment clouded by a lack of empirical rigour. Indeed, the lack of Regulatory Impact Assessment for the JRT Review should not come as any surprise, since the CAA do not currently collect the full set of statistics necessary to provide such an analysis of changes affecting general aviation.

The net effect is that UK general aviation appears to be entering something of a spiral dive... the bad news is that the lack of data

*Above left: GA activity at Shorham has fallen by 63 percent*

*Above: commercial air transport has forced GA out of Luton, with movements falling by more than 90 percent*

means that this is effectively happening in IMC. Will the AAIB be called in, or can each of us help AOPA skilfully pilot UK general aviation away from danger?

*\*Ian Harnett is an economist and stock market strategist, initially with the Bank of England and subsequently with some of*

*Europe's leading investment banks. He has a Doctorate in Economics from Oxford University.*

*A passionate aviator and a member of AOPA's member's working group, recently set up to draw opinions and experiences from grass roots members, he is a UK PPL (SE & MEP with IMC, tailwheel and night ratings) as well as an FAA PPL with 370 hours. Since learning to fly in 1999 Ian has flown aircraft as diverse as the Piper Cub and the float version of the Beaver, and has experienced jet aerobatics in a Strikemaster. He currently flies a Rockwell Commander 114 from Elstree as often as he can. ■*

For a **closer look** at **aviation insurance**

Visit us on stand J125 at: 

 HAYWARD AVIATION LIMITED  
INSURANCE BROKERS

Hayward Aviation Limited Harling House 47/51 Great Suffolk St London SE1 0BS  
Email: info@haywards.net Web: www.haywards.net Tel: +44 (0)20 7902 7800 Fax: +44 (0)20 7928 8040