GA's rapidly growing enemy?

Across the country, wind farms are being permitted by local planners who are ignorant of aviation safety. By **David Ogilvy**

About eight years ago, the spread of wind turbines started to have a damaging effect on general aviation aerodromes and airstrips. Since then AOPA has assembled facts and figures from many sources; and we dislike what we have learnt. The problem is worsening rapidly, but clearly it remains in its relative infancy, so we need to grow both our awareness and our action plans at a matching rate.

Wind farms are not new. We have reports of incidents in the UK occurring as long ago as 1975, which is long before we began to concern ourselves from an aviation standpoint. Of 17 known hiccups between 1993 and 2005, considerable concern surrounds turbine fires, some of which have occurred near to forests and which can be difficult to fight due to their height and remote locations.

Although by no means the only serious occurrence, perhaps the turbine blaze at the Nissan factory at Sunderland is the one that has been most widely publicised. The fire there was so fierce at all three carbon fibre blades – each 75 feet long – eventually dropped off. It was impossible to stop the burning blades continuing to revolve as the brake had been damaged by the fire. The thick black smoke could be seen for many miles around and the scare caused the police to close two nearby A roads. Tyne and Wear Fire Service had no fewer than seven fire engines in attendance. Imagine this happening in the close vicinity of an active aerodrome.

Although AOPA must be concerned primarily with aviation safety, our attitude to the overall turbine programme needs to be geared also to the productive value of these developments. Despite a cost of £2 million, the six Sunderland turbines generated only 5% of the factory's electricity requirement. Perhaps we had a more-than-usual interest in this occurrence as the Nissan site was formerly Sunderland Airport, where GA provided the majority of the movements, and which in 1987 was

the first aerodrome to be lost in the current spate of closures, restrictions and threats. Shortly, this was followed by the loss of Derby (Burmaston) Airport, also to a Japanese car manufacturer (in this case Toyota), which led to the start of the still-growing AOPA campaign to fight for the future of aerodromes for GA.

Other known incidents affecting the safety of wind farms include two more in the north-east. As long ago as 2002, a turbine blade at Blyth in Northumberland collapsed, causing closure of the harbour. Three years later, all turbines in Hartlepool and East Durham were shut down following safety fears over their operation. These and many other mishaps have led to expressions of concern by the Renewable Energy Foundation whose Chief Executive Officer has stated "we need a much more responsible attitude to wind farm planning". The relevant authorities in Denmark, with far more practical experience than we can claim in the UK, have concluded "if wind farms belong anywhere, they belong well out to sea".

Clearly it is not a part of AOPA's duty or desire to challenge the need for renewable energy sources, but so far any supporting evidence for the proposed proliferation of wind farms has been weak and unconvincing. Unfortunately for GA – and, indeed for all sections of aviation – these damaging and potentially dangerous obstructions have been given government priority over other prospective and less harmful power providers.

This not a matter of political bias. AOPA's task is to secure the future of GA and if readers could see the number of related queries and concerns that come our way, more people would take more action. Although all cases are different, there are many common issues that we raise with planning authorities and with developers throughout the UK. The top of a turbine can be as much as 500 feet above ground level, close to the height at which many light aircraft approach their destinations. This is especially critical in conditions of low cloud, poor visibility or failing light, or, at the other end of the weather scale, on a bright day when flying towards a low sun. When we look at the full breadth of GA activity, there are several other practical considerations such as the physical danger to parachutists and turbulence, which is generally accepted as being hazardous for microlights.

Throughout the UK several applications for wind farms are in various stages of the planning process and there are many more to come. Fortunately we are aware of two applications that were refused on flight safety grounds and, where appropriate, AOPA will help to ensure that others are rejected. Another aspect that we have put forward in several cases is the possible liability if a planning authority grants permission against professional aviation advice and then there is an accident. This has been taken on board by some councils, and we consider it

our duty to warn others.

Although AOPA is concerned primarily with the physical dangers to aircraft caused by turbines, there is also a psychological consideration. From above, at low level, high obstructions appear taller than they are and can be seen almost to meet the aircraft, especially when they disappear under a low wing. Well I remember flying from an aerodrome that had tall electricity pylons under the approach to a very short runway and this was very disconcerting. Then there is radar interference. In the main this is of concern only

Then there is radar interference. In the main this is of concern only to larger aerodromes and this is handled on their behalf by the Airport Operators' Association, who have produced 'Guidance for airports on the assessment of wind turbine proposals in the vicinity of airports'. Of use to the wider section of the aviation community is the Civil Aviation Authority's CAP 764 (CAA Policy and Guidelines on Wind Turbines), which contains some very helpful advice. This is available in electronic format at www.caa.co.uk/publications or as a printed document from The Stationery Offce, PO Box 29, Norwich NR3 1GN.

Perhaps the most important angle on this is the need for us all to keep ahead of the game. Although in AOPA we think we have a fair handle on it, we have no magic wand and cannot help if we are not asked to do so *in good time*. In some cases people come to us when it is too late – in one instance *after* planning permission had been granted – so I ask all our readers to keep fingers on the relevant pulses. It is government policy that many thousands of new pylons will be erected throughout the UK; without doubt many of these will be in positions that make them potential hazards to GA; so in your own interests I am waiting to hear from you. Soon!

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