

THE MINISTRY OF DEFENCE

The Cefn Croes plateau is inside the Mid Wales Tactical Training Area (TTA), largely confined to the Cambrian Mountains, where the RAF routinely conducts operational low-flying training exercises with fast jets and Hercules transport planes down to as low as 100 feet. There are only two other such areas in the UK, one in northern Scotland and one in the border region of southern Scotland/northern England. The latter is used for tactical radar avoidance training as well, and the Electronic Warfare Tactics Range (EWTR), an RAF facility also made available to other NATO countries, is located at RAF Spadeadam nearby.

The following is written in a document commissioned by the Wind Energy, Defence and Civil Aviation Interests Working Group, published in 2002 under the title 'Wind Energy and Aviation Interests – Interim Guidelines':

'The Low Flying System (LFS) employed in the UK is unique. It covers the whole of the open airspace of the UK and surrounding oversea areas up to 3 nautical miles offshore, from the surface to 2000 feet above ground or sea level. By contrast, in Germany aircraft may generally not fly below 1000 feet, well above the top of even the largest wind turbine.' A footnote adds: *'The air forces of other nations face the same need to hone their flying skills. In the case of Germany, much of this is done in Canada, at considerable expense.'*

In other words, operational low-flying training over the UK is not something the MOD would wish to jeopardise.

MOD policy on wind farms in TTAs was summed up in a House of Commons statement on March 22nd 2001 by Dr Lewis Moonie, Parliamentary Under Secretary of State for Defence: *'In principle the Ministry of Defence has no objection to wind farms.'* The statement then gave a brief summary of the three TTAs and the conclusions of a study by the RAF Signals Engineering Establishment into the effects of wind turbines on radar performance.

Dr Moonie then continued:

'In the interests of flight safety, the safety of the aircrew and members of the public, it is vital that any hazards to low flying aircraft are minimised. Any extraneous distractions of possible reduction in external support capabilities, such as that provided by ground radar, can have a deleterious effect upon aircraft safety, and thus the safety of aircrew as well as those on the ground.'

'It is, therefore, MOD opinion that obstacles in excess of 100 feet in height, unlit by night and with the ability to cause interference to radar, have the potential to create an acute safety hazard to aircraft engaged in operational low-flying training, tactical radar avoidance training, specialised night flying and test and evaluation flying, however, each case has to be considered on its merits.'

Predictably, MOD objected to a proposed wind 'farm' on Humble Hill in the Kielder Forest of Northumberland, on the grounds that the turbines would interfere with low-flying and radar over the EWTR. The application was subsequently refused by the DTI. Ecogen, the developers, applied to the High Court for judicial review of the decision in early 2002 but lost.

In a written answer to Ceredigion MP Simon Thomas on December 13th 2001, Dr Moonie stated:

'Over the last two years, the Ministry of Defence has objected to twenty-six proposals to site wind farms within Tactical Training Areas..... The objections relate to the physical obstruction that would be caused by the wind farms within areas where fixed-wing aircraft are engaged in Operation Low-Flying (OLF) training down to 100 feet Minimum Separation Distance.... In order to preserve the tactical freedom to practise OLF it is important that the number of tall obstacles, such as wind turbines, is minimised within those areas. For this reason an objection is often, but not always, raised to proposals to locate turbines in any of the TTA.'

Although Wales only provides 11.2% of the total overland area useable in the UK for low-flying training, its importance is highlighted in an MOD document entitled 'The Pattern of Military Low Flying across the United Kingdom 2000/2001'. In relation to Low Flying Area 7 (virtually the whole of Wales), it says:

'The Welsh landscape, lack of avoidance areas and little controlled airspace above 2,000 ft (giving increased flexibility for military aircraft to enter or leave the lower airspace) combine to make LFA 7 a key training area for military low flying training.'

The relative value of LFA 7 is also made clear in a letter written to a campaigner on June 25th 2001 by Squadron Leader PL Sinclair, RAF Community Relations Officer for Wales:

'All the military flying that you see taking place over Wales is essential to the qualification of air crews and, along with other parts of the UK, the Principality offers some excellent areas over which they can practise very perishable skills. These skills are tried, tested and brought to bear when you see or hear of the sterling work that is carried out by the RAF in very

difficult and sometimes hazardous conditions.....Sierra Leone to rescue hostages.....to assist refugees in northern Iraq, Timor and Mozambique. Coupled with this the aircrews, and in particular the Hercules aircrews, have to learn how to operate into areas of difficult terrain such as Bosnia and Kosova. Low flying is essential to this and whilst we take every opportunity to “export” the training to some of the most remote areas of the world, there is much that we can accomplish from our home bases.’

So what about Cefn Croes? Surely, it would not be safe to fly down to 100 feet in the vicinity of 39 turbines 328 feet high on this 1,800 foot plateau where the weather could change and fog descend rapidly, drastically reducing visibility often within minutes!

The MOD agency which handles military aviation safety issues is Defence Estates (Safeguarding) in Sutton Coldfield. On July 28th 2000 they sent their initial response to Ceredigion County Council’s consultation. It was signed Chris Lewis, Safeguarding, and read: *‘As you may be aware, wind farms can be detrimental to military operations and any proposals must be rigorously checked by several technical advisers.’*

However, not long after this, and months before their definitive response of the February 27th 2001 to Ceredigion County Council, the ‘Cambrian News’ reported on November 9th 2000: *‘They (RAF) are not objecting to the proposed Cefn Croes development...’*

Why? Taking the UK as a whole, RAF objected to over 80 out of a total of about 400 wind farm applications. So why not Cefn Croes? What had happened to the ‘rigorous checking by several technical advisers’? And if anyone was going to be ‘rigorous’ in their checking, surely it would be the RAF ‘grass roots’, the pilots themselves, whose lives would be potentially put at risk by the turbines! Weren’t they worried? What did they make of the decision by the top brass not to object?

It was to try and find out the answer to these questions that a campaigner telephoned RAF Strike Command, High Wycombe, where on the April 25th 2001 a spokesperson gave the following information, transcribed from an answer-phone message:

‘I’ve spoken with the officer who deals with wind farms from a flying point of view and I can assure you that in fact we have objected. The objection was submitted to it on 29th August last year (2000), on the grounds that this particular farm is within an operational low-flying area, i.e. where, on a limited number of times during the year, aircraft are authorised to fly down to 100 feet. And so, therefore, objection has been lodged. We may never know whether the thing is built or not; nobody tells us. The objection was sent from here to Defence Estates and Defence Estates had taken it up,

either to lodge the objection to the builder who submitted the application, or local authority with whom it (the application) has been lodged.'

In a subsequent telephone conversation the RAF spokesperson divulged that the objection's author was a Squadron Leader. The campaigner telephoned him the next day and he confirmed that he wrote the objection as stated. Around the same time at RAF Henlow another spokesperson advised: *'We did in fact lodge our objection with Defence Estates.'*

The campaigner then telephoned Defence Estates on April 26th 2001 and spoke to Diane Jackson, Head of Safeguarding at the time. She was asked why this objection (or these objections) had been ignored by the MOD. Her remarks were transcribed from notes taken during the conversation:

'I assure you that we have examined this matter very thoroughly indeed; we have taken extensive advice. The developer went ahead with this application on the understanding that we were not going to object. At the time we were first consulted, that was the situation. Since then, because of changes in the world situation, the RAF's requirement for that particular operational area has increased and that is why they would have lodged objections. But Defence Estates has to consult a great number of specialists and our overall decision has been that we will not object. The developer has now spent huge sums of money on this proposal; we would not win the argument if we now objected at this late stage. We also have to take into account the requirements of the renewable energy targets.'

This was a clear admission not only that the MOD was looking over its shoulder at central government with its single-minded determination to fulfil the Kyoto targets, but also that fear of a legal challenge by an irate developer was preventing it from objecting to the Cefn Croes scheme. Were they worried about a legal challenge as in the Ecogen/Kielder case?

Written confirmation of this was contained in a letter dated June 22nd 2001 from PF Stirrat, Capital Valuations, Defence Estates:

'It is also correct that it was considered that as the developer had proceeded with the proposal at some expense, on the basis of no objections from the Ministry of Defence, and the RAF had concluded that they could reasonably avoid the turbines in this position, any eleventh hour challenge to the proposal by the Ministry of Defence would be unreasonable and unlikely to succeed.'

The phrase 'in this position' merits further explanation. In a letter dated June 8th 2001, Phil Hill of Defence Estates Agency Secretariat, seems to provide it. This is what he writes:

'With regard to our appraisal of the Cefn Croes wind farm, the initial proposal was originally referred to our specialist advisers in 1998 and no objection was raised. When the formal planning application was assessed in 2000, the RAF did express a new concern because of the position of the site just within one of the Tactical Training Areas.... However, an obstacle at this position near to the edge of the TTA can be avoided and therefore the RAF decided that they did not wish to raise a formal objection to the Cefn Croes scheme.'

While it is doubtless strange that the MOD decided not to object years before it had any clear idea what it was being asked to assess, it is even stranger that later on one and the same feature of the proposed wind farm site served two opposite purposes within a short space of time. The fact that Cefn Croes was 'just within' the TTA was first given as the reason why 'the RAF did express a new concern', and then the fact that the site was 'near to the edge of the TTA' was cited as the reason why 'the RAF decided that it could be avoided'.

It all makes perfect sense, of course, if one interprets Mr Hill's first 'RAF' as being the pilots and his second 'RAF' as being the top brass. For the pilots, indeed, the fact that Cefn Croes was 'just within' the TTA was one reason why no wind farm should be built there. They would wish to err on the side of caution.

It may be relevant to mention in passing, that when Defence Estates were first asked about the proposal, the guidelines relating to wind 'farms' in Ceredigion County Council's Local Plan (Deposit Version) stipulated that turbines must not exceed 30 metres in height and must not be built in clusters of more than 30. It was only in January 1999 that Ceredigion relaxed its Windfarm Design Criteria following lobbying by the British Wind Energy Association. Had the MOD known back in 1998 that 327 foot high turbines could be going up in a TTA where their aircrews train at altitudes of 100 feet, their initial response might have been quite different!

Another curious element was introduced into the scenario by Diane Jackson in a letter dated October 30th 2001. She wrote:

'It is true to say that concern was raised within RAF because the Cefn Croes site lies within one of the Tactical Training Areas. However, the RAF subsequently undertook an assessment of the operational impact of this wind farm and they concluded that as the site would lie between two other obstructions that are already avoided, its location may be accommodated without significant detriment to essential training.'

Therefore the MOD did not object simply because there were no grounds on which to lodge an objection.'

It was only later that the identity of these "two other obstructions" became clear. On January 7th 2002, Diane Jackson wrote: *'Those obstructions are radio/tv towers at Cefn Croes and Hafren Forest.'* What she did not say was that these masts were not new; they were there well before the time RAF Strike Command lodged its objections on August 29th 2000 and neither of these static structures exceeds 50 metres.

So, what changed between then and 'the latter part of 2000', which, according to her letter of January 7th 2002, was when RAF carried out its second and definitive assessment of the site? What pressure was brought to bear upon the pilots to conclude only a few weeks after their objection that the wind 'farm' would not be a problem after all? Were they right the first time, or the second time? Who leant on them? The truth may never be known.

It is an interesting fact that the MOD have subsequently objected to the extension to the Llandinam wind 'farm', near Newtown, also on the edge of the TTA, where 103 turbines already exist. The reason cited was that the development would have a significant effect on the effectiveness of the TTA. Why could they not avoid those 103 structures already there?

It may be worth citing at this juncture, nevertheless, the opinion of a retired RAF pilot who commanded a Hercules squadron and led training sorties through the Mid Wales mountains. According to the 'Cambrian News' of May 24th 2001, Retired Wing Commander Ken Williams had written to the Secretary of State for Defence Geoff Hoon:

'I remain convinced that 327-foot turbines on a 1,700-foot plateau where currently tactical low-flying is permitted down to 250 feet, and even 100 feet, adjacent to the proposed development, is unacceptable.... I would be failing in my duty as a past commander if I did not draw this very serious matter to your attention.'

As the article points out, Mr Williams lives in Ponterwyd and he used to fly over this area on low-level exercises. The radio/tv masts referred to by Miss Jackson would be very well known to him. It certainly did not strike him that the fact that pilots were already used to avoiding these relatively small obstructions located several miles apart were a reason to dismiss the danger posed by 39 huge turbines. Miss Jackson's bland assertion (ibid) that: *'The height avoidance would need to be adjusted accordingly for any taller obstructions'* sounds extremely hollow.

No less fatuous are the remarks addressed to Ceredigion MP Simon Thomas in a letter from Dr Lewis Moonie, dated June 11th 2001:

'The MOD does not, in principle, object to wind farms but it must seek to ensure that the airspace designated for operational low-flying (OLF) can continue to support that essential training. The Cefn Croes proposal served to focus attention on this aspect of RAF business and led to the establishment of the policy on obstacles that appeared in Hansard on 22nd March 2001 in Written Answers column 296.'

As we have seen, that policy related mostly to the effects of obstacles on radar performance, and enshrined nothing more concrete than that each case has to be considered on its merit. This is exactly how Dr Moonie concludes his letter to Simon Thomas: *'Each proposal for the creation of a wind farm has been, and will continue to be, examined on its merits by MOD and wherever practicable we support these developments.'*

Defence Estates officials repeatedly emphasised that the MOD permitted Cefn Croes because it lay 'just within' the TTA; but they were equally keen to affirm that the line would be drawn here: the MOD would not countenance any more massive wind farms within the Cambrian Mountains.

This was certainly the impression Diane Jackson strove to give. In her already quoted letter of January 7th 2002 we read: *'The RAF did express an earnest wish that the proliferation of wind farms within Tactical Training Areas (TTAs) be prohibited.'* So, even though this stance did not bear fruit in the matter of Cefn Croes, when it came to the Camddwr Trust's proposal for 165 turbines within the TTA things would be very different.

In fact, on January 10th 2002 Ms Jackson wrote:

'We have checked our records and we have consulted about this proposed development although the number of turbines was not specified. The proposed site lies inside the Tactical Training Area (TTA). Therefore, the MOD advised the developer on 05 November 2001 that we object to this proposed development because it lies inside the TTA.'

Reassuring news about another proposal within the same TTA was reported by the 'Cambrian News' on October 17th 2002:

'Plans for one of the biggest wind farms in Ceredigion have been shelved after the Ministry of Defence protested that "it would interfere with low-flying." National Wind Power (NWP) had planned to erect 40 turbines at Nant-y-Maen, near Tregaron but according to the report it pulled out of the £20 million scheme "because it believed Ceredigion County Council would have been very unlikely to approve the plan after the MOD's safety warnings.'

A representative of NWP, Mark Legerton, was quoted as saying: *'I can fully understand why the MOD objected, but we would like a more relaxed approach to wind farms in low-flying areas. However, if Camddwr goes ahead, our scheme could perhaps come in on the back of it.'*

Ominous words indeed. All the indications are that work is progressing to enable the formal planning application for the £200 million Camddwr scheme, which will be decided by the DTI, to be submitted in the first half of 2003. [Editors note: The Camddwr proposals have not yet been submitted – July 2003]

The paper writes:

'The Trust believe they will get a sympathetic ear from a DTI under pressure to meet UK renewable energy targets. The MOD, however, knows that if Camddwr goes ahead that will be the end of low-flying in Wales.'

There is no doubt that the DTI has the power to overrule an objection by the MOD. But if the government decided to sacrifice the Mid Wales TTA to meeting the Kyoto targets in renewable energy, how would it make up for the loss of low-flying training facility for fighter jets and Hercules transport planes?

As we have seen, the Welsh airspace is of particular value to the MOD and it would be virtually impossible to find an alternative to it elsewhere in the UK that is not already fully utilised.

So, what will happen if (or, as is now becoming ever more likely, when) the turbines go up on Cefn Croes? Here is PL Sinclair again:

'I can assure you that we are all exercised by the prospect by a new wind farm development in Mid Wales If, in line with government policy on alternative energy sources, the Cefn Croes development is approved, we will take all appropriate steps to ensure that our aircrews are briefed on the location and size of the turbines and our maps and charts will be updated. The aircrews will then apply appropriate avoidance criteria to the turbines in the same way that they now avoid any other obstacle. This might mean that flying patterns in the area will change but it is too early to say in what way. There are no plans to cease low flying operations in the Tactical Training Area if the Cefn Croes development goes ahead.' [ibid]

What we can be almost certain of is that low flying will be displaced from the airspace over the wind 'farm'. Will this mean that residential areas previously avoided will in future be overflowed by jets down to as low as 250 -100 feet from the ground? Would the RAF dare to risk this? Ever mindful of its relations with the public in the TTAs, it would in any case have an even

harder task to keep disturbance to a minimum and to deal with the inevitable increase in complaints.

It was to address problems of this kind that the Working Group was set up in 2001. Its conclusions, published in the 'Interim Guidelines' (quoted near the start of this chapter) were launched in October 2002 at BWEA's 24th Annual Conference. The choice of venue for the launch indicates the government's priority. In a letter dated May 11th 2001, Mr Ian Smith of Defence Estates Directorate divulged that apart from the technical problems it was also *'our intention to use this group to improve our procedures to expedite the clearance process'*. Not so different from Energy Minister Brian Wilson, when announcing his intention on December 10th 2001 to grant consent for Cefn Croes, trailing his new rules that would *'unlock around 100 renewable energy projects, currently blocked by planning constraints'* – mostly wind projects, needless to say.

The emphasis in Dr Lewis Moonie's foreword to the 'Interim Guidelines' is also indicative. He begins with these words:

'The Government has a target to achieve 10 per cent of the United Kingdom's energy from green sources by 2010 which my Department fully supports, and makes every effort to assist in achieving this.' His concluding remark is no less significant: *'I believe these guidelines are a welcome addition to both setting out my Department's and the Government's position and will greatly assist all involved in the Wind Energy Industry.'*

In other words, for every government department, as for every level of government, wind energy targets have now become the dominant imperative. Just as local authorities are pressured to water down age-old planning regulations achieved through many hard-fought struggles to protect the landscape from inappropriate development, so now – even with the escalating state of fear of global terrorism – the military's need to train aircrews capable of coping with every eventuality will be subordinated to the wind energy interests.

Is it fanciful to suggest that this could also account for the apparent obfuscation around the issue of lighting, if not for its total disappearance from the wind farm 'radar screens'? The 'Interim Guidelines' keep totally quiet on the topic even though in his policy statement (Hansard March 22nd 2001) Dr Lewis Moonie had clearly stated that *'....obstacles in excess of 100 feet in height, unlit by night..... have the potential to create an acute safety hazard'*.

Operational low flying in the hours of darkness does occur within the Cambrian Mountains TTA. It is therefore a little strange that in its conclusive response to Ceredigion on February

27th 2001 we find that, rather than demand that the turbines be lit, the MOD merely asks to be told, in the event of the development going ahead if the site WILL be lit.

Equally strange is the fact that less than two months after Dr Moonie's policy statement, Mr Ian Smith asserted that the MOD '*...do not require the turbines to be lit*'. [ibid]

Concern that the night sky above the Cambrian Mountains could be turned into '*a virtual fairground with rotating coloured lights*' was put to the developer, Mr Geraint Jewson. His reply was somewhat disingenuous if not outright evasive:

'We do not have to light the turbines under Civil Aviation Authority (CAA) regulations and I can categorically state neither the turbines or blades will have aircraft warning lights on them.' ('The Western Mail' Feb 9th 2001.)

Mr Jewson's reply is hardly relevant, as the Cefn Croes turbines would be over 100 metres in height and the CAA only requires lighting on structures over 150 metres. In any case, even the CAA has on occasion demanded temporary lighting on structures as low as 60 metres for search helicopters operating on remote moors in poor visibility. And had it not occurred to Mr Jewson that the MOD's requirements for lighting might be more stringent?

That the question of lighting is by no means done and dusted is illustrated by the difference between the planning conditions as quoted in the Planning Officer's report which stated: '*None of the wind turbine generators or wind monitoring masts hereby granted planning permission shall be externally lit for any purpose. Reason: In the interests of the visual amenities of the locality and to prevent light pollution*'; and the planning obligations attached to the DTI's consent document which states: '*No wind turbine generator or anemometry mast forming the Development shall be externally lit for any purpose, unless otherwise approved in writing by the Council.*' This opens up the possibility for the MOD to insist that the turbines be lit even at some later stage.

Be that as it may, the overall conclusion one is bound to draw is that as long as this government adheres to its policy on wind 'farms' the goalposts will continue to be moved.