

SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL

REPORT TO:	Development and Conservation Control Committee	7 th June 2006
AUTHOR/S:	Director of Development Services	

S/1569/02/F – Bourn Wind turbine at Rockery Farm for Mrs Ward

Recommendation: Refusal
Date of determination: 27th September 2002

Update

1. This application was to be considered at the 2nd February 2005 meeting of this Committee but was deferred at the request of Mr Ward in order for him to respond to the points raised in the Committee report. A copy of the report to the 2nd February 2005 meeting is attached as an Appendix.
2. Subsequent to the meeting, an 'Assessment of Impact on Flying Operations at Bourn Airfield' prepared by Spaven Consulting on behalf of the applicant has been submitted. It concludes by stating that:
3. "There is no evidence from airfields which currently have wind turbines close to their approach paths or within their circuit area that these cause any problems for pilots using the airfields.
4. The move of the microlight flying school from Great Orton due to the presence of wind turbines does not transfer across to the Rockery Farm/Bourn situation because:
 - (a) The turbines causing the problem were 68.5m in height, 52% taller than the turbine proposed at Rockery Farm.
 - (b) There are six turbines at Great Orton compared to only one proposed at Rockery Farm.
 - (c) The original 47m turbines at Great Orton caused no problems even though there were 10 turbines and the closest was located 260 metres from the runway edge - 90 metres less than the distance between the proposed Rockery Farm turbine and the final approach track for runway 36 at Bourn.
5. Data from CHIRP, the CAA and the AAIB demonstrate that a variety of sources of pilot distraction exist, including vehicles, other aircraft etc. These include two accidents at Bourn in which distraction was a causal factor, one due to a parked car close to the runway and the other due to concern about the proximity of another aircraft. However there is no specific evidence from safety reports of wind turbines causing distraction of pilots anywhere in the UK.
6. Flying operations at Bourn aerodrome are already subject to pilot distraction due to vehicle activities including motorcycle training in the area of disused aerodrome immediately north of the active aerodrome. This is acknowledged in the entry for Bourn in the UK Aeronautical Information Publication (AIP) which states under 'Warnings'. The aerodrome is located on part of a disused aerodrome on which other air and vehicular activities take place outside the licensed area.

7. Vehicles and trains are a common source of distraction to pilots at numerous airfields across the UK where roads and railways cross under the final approach. Examples of training airfields where this occurs are Cambridge, Oxford, Kemble, Shoreham, Wycombe, Redhill, Southampton, Gloucester, Filton, Bristol, Barton, East Midlands, Humberside, Newcastle, Edinburgh and Fife. At many of these airfields a specific warning is included in the AIP about obstacle clearance over high vehicles. Because the appearance of vehicles is sporadic and unpredictable, they move at variable speeds, and they come in a variety of sizes, shapes and colours, they are likely to be a more significant source of distraction to pilots on final approach than a single wind turbine in a permanently location 350 metres off the final approach path. The fact that training and other flying operations have been conducted safely at Bourn (with the exception of the Gardan Horizon accident in 2001) with extensive vehicle activities under the final approach indicates that pilots of all abilities are capable of dealing with such distractions. There is no reason to expect that a single wind turbine would present any additional difficulty”.

Consultations Update

Further Comments on Application

8. **Bourn Parish Council** “withdraws its previous comments on this application and now recommends refusal as it is in the wrong place.”
9. **Caxton Parish Council** makes no recommendation.
10. **Rural Flying Corps** has confirmed that it would be prepared to substantiate its objections at appeal if necessary. In addition to comments previously made it states that there must be a finite, if extremely low risk, of ice forming on stationary blades and then being thrown off at high speeds when the blades start rotating and contacting an aircraft which would have catastrophic results. It also confirms that runways 01 and 19 are now runways 36 and 18 respectively.

Comments on the ‘Assessment of Impact on Flying Operations at Bourn Airfield’

11. The **Owner and Licence Holder of Bourn Airfield** states that: the airfields referred to in the Assessment are not comparable either because the turbines are substantially further away from the runways than proposed in this application or are not licensed; and the many pilots and similarly qualified flying instructors who fly from Bourn strongly disagree with the conclusion of the report and consider that a turbine in this location would be a serious hazard.
12. **Rural Flying Corps** states that: “an aircraft on landing approach for runway 36 when abeam the turbine will be at a height of about 35 metres whereas the turbine tips would be at a height of 45 metres, 10 metres above the aircraft and clearly visible in the peripheral vision of the pilot; the airfields referred to in the Assessment are not comparable either because the turbines are substantially further away from the runways than proposed in this application or are not licensed; it is not surprising that there is no specific evidence from safety reports of turbines distracting pilots anywhere in the UK as no turbine has yet been put in such close proximity to the final approach at a licensed airfield as proposed as part of this application; and a large conspicuous and unusual moving object is an entirely different matter to vehicles etc on or adjacent to licensed areas which pilots would be used to seeing. It concludes by stating that it believes that the turbine would cause a significant distraction to pilots during safety critical phases of flight, particularly the landing approach to runway 36 and the take-offs and go-arounds from runway 18. It does however state that, were the turbine to be sited 200-300 metres further to the west, it is unlikely to have any objection.”

Representations Update

13. Letters of support have been received from 4 Greenpeace volunteers.

Planning Comments – Key Issues

14. The key issues in relation to this application are: the visual and landscape impact of the proposal; the impact on residential amenity; the affect on the approach to Runway 36 at Bourn airfield/flight safety; and the affect on Cambridge Airport's radar.
15. For the reasons stated in my report to the 2nd February 2005 meeting, I consider the visual and landscape impact, the impact on residential amenity, the affect on Cambridge Airport's radar, the affect on horses and the impact on birds/wildlife of the proposal to be acceptable.
16. However, although just outside the Inner Horizontal Surface (an imaginary surface situated above Bourn Airfield which extends to a radius of 2000 metres from the centre of the runway), the proposed turbine is close to the approach path for runway 36 at the Airfield, which is used for pilot training. The license holder and Flying Corps at the Airfield are concerned that the large moving blades would cause a significant distraction to pilots during safety critical phases of flight, particularly the landing approach to runway 36 and the take-offs and go-arounds from runway 18, and would thereby present a danger to flight safety. It appears to me that the blades could cause such a distraction and it is therefore my view that, for this reason, the application should not be supported.

17. Recommendation

1. Refusal (as amended by additional information received 3.10.02 and Assessment of Impact on Flying Operations at Bourn Airfield date stamped 7.3.06)
2. The proposed turbine is close to the approach path for runway 36 at Bourn Airfield, which is used for pilot training. The large moving blades would cause a significant distraction to pilots during safety critical phases of flight, particularly the landing approach to runway 36 and the take-offs and go-arounds from runway 18, and would thereby present a danger to flight safety. The proposal is therefore contrary to Planning Policy Statement 22: Renewable Energy which requires Local Planning Authorities to satisfy themselves that proposals for wind turbines have addressed potential impacts in relation to aviation.

Background Papers: the following background papers were used in the preparation of this report:

- Cambridgeshire and Peterborough Structure Plan 2003
- South Cambridgeshire Local Plan 2004
- Planning Policy Statement 22 'Renewable Energy' 2004 and its Companion Guide, 'Planning for Renewable Energy' 2004.
- Planning file ref. S/1569/02/F

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