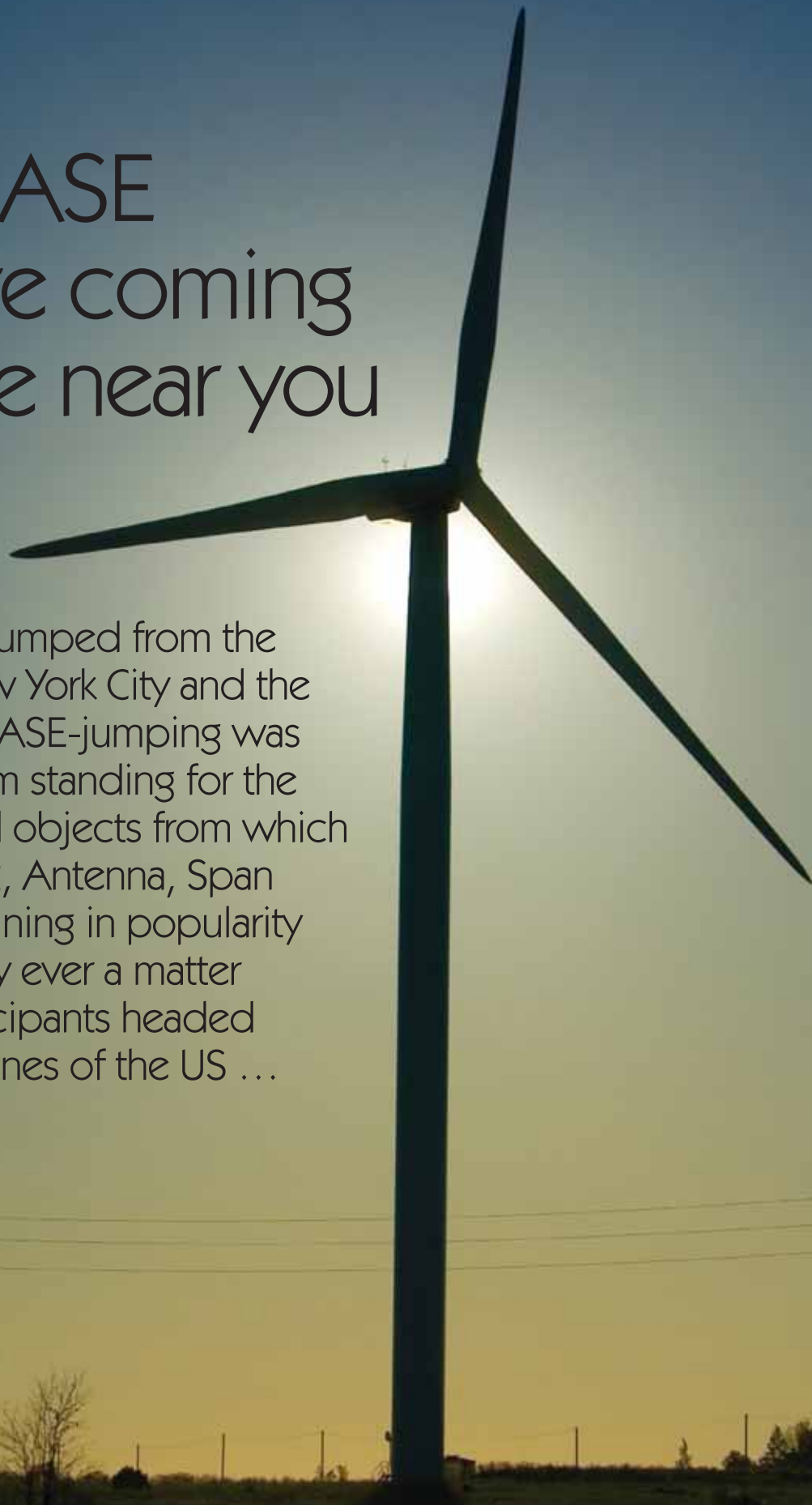


Warning: BASE jumpers are coming to a turbine near you

In 1912 Frederick Law jumped from the Statue of Liberty in New York City and the modern-day sport of BASE-jumping was born. BASE, an acronym standing for the four categories of fixed objects from which one can jump: Building, Antenna, Span and Earth, has been gaining in popularity recently and it was only ever a matter of time before its participants headed towards the wind turbines of the US ...



One has to see the inevitability of it all. After all, a group of adrenaline junkies whose numbers have included a man who wanted to parachute from the 86th floor observation deck of the Empire State Building in New York, is hardly likely to think twice about scaling a mere 40-meter wind turbine before leaping into the unknown. Yes, BASE-jumping is here and it's probably coming to a wind turbine near you – or worse – owned by you, soon! Packing a parachute and hurling yourself from skyscrapers, mountains and bridges, "is living like a rock star", said one reformed adrenaline junkie.

BASE jumping is the adrenaline sport of parachuting from fixed objects and is an acronym that contains the major groups of objects these jumpers generally use: Building, Antenna, Span (bridge), and Earth. It has traditionally been a highly furtive activity, carried out by a closed set of radical enthusiasts. The YouTube website seems to add to its growing database of BASE jumping videos on a daily basis and that can't but increase awareness and thereby attract more potential recruits to the sport.

Moreover, what is of special interest to PES is that it is an activity whose participants would seem to have the regularly-increasing battery of wind turbines throughout the US, firmly in their sights.

A BASE jumper has a similar experience to that of a conventional parachutist, but minus the added luxury of a 6,000-foot plunge which, of course, buys time. Exiting the aircraft at 6,000 feet gives the jumper approximately 36 seconds, at terminal velocity, before a fatal impact with the ground. And while 36 seconds may not sound like a lot of time, when your life depends upon it, it is plenty. The average BASE jump is from about 1,000 feet and therefore the BASE jumper has no inbuilt margin for error.

For example, a BASE jump from a 500 foot (150meter) object is about 5.6 seconds from the ground if the jumper remains in free fall. On a BASE jump, the parachute must open at about half the airspeed of a similar skydive, and more quickly (in a shorter distance fallen). Standard skydiving parachute systems are not designed for this situation, so BASE jumpers often use specially-

designed harnesses and parachute containers, with extra large pilot chutes, and many jump with only one parachute, since there would be little time to utilize a reserve parachute. If modified, by removing the bag and slider, stowing the lines in a tail pocket, and fitting a large pilot chute, standard skydiving gear can be used for lower BASE jumps, but is then prone to kinds of malfunction that are rare in normal skydiving (such as 'line-overs' and broken lines).

Another risk is that most BASE jumping venues have very small areas in which to land. A beginner skydiver, after parachute deployment, may have a three-minute or more parachute ride to the ground. A BASE jump from 500 feet (150 meters) will have a parachute ride of

What is of special interest to PES is that it is an activity whose participants would seem to have the regularly-increasing battery of wind turbines throughout the US firmly in their sights

only a few seconds. While a further luxury that BASE jumpers dispense with is the margin for error in flight-orientation. Ideally, skydivers try to remain in the same orientation after canopy deployment as before. If the skydiver is facing due north in free-fall, after canopy deployment, he should not rotate.

Sometimes, either due to unstable body position, sloppy parachute packing, or any number of other minor reasons, the jumper can rotate causing line twists or simply causing the jumper to fly in a direction opposite to that which he intended. In a normal skydive, this generally will not matter. The canopy pilot can simply turn the parachute around and regain the intended orientation. A BASE jumper is usually only a few feet from the object from which he jumped. An off-heading opening will usually be fatal. And these people could be heading our way. So what is its attraction? "You're doing something everybody wants to do, but they can really only dream about. They're either too fearful, or else they don't have the gumption," said Jim Jennings, a

Portland man who has completed about 700 BASE jumps. "You feel special, because you're kind of cheating death." But, talking of 'cheating death', Jennings has now interestingly quit base-jumping – and his livelihood as an instructor – after witnessing six people die in a 14-month period. Extend those figures to the wind turbine industry and the negative fall-out could potentially be catastrophic for the business's otherwise bright-looking future.

Of course one way of preventing trespassers armed with parachutes and intending to hurl themselves into the abyss beyond from your wind turbine might be to adopt the approach of our cousins across the Atlantic and actually organise a properly-run BASE-jumping

competitive event. That way, at least the dangers can be minimised, and a repeat of what happened during the Empire State debacle avoided.

In 2008, a professional stunt jumper who was thwarted from leaping from the building's observation deck decided to sue the famous New York landmark, claiming, with no little irony, that its employees had endangered his life. "My life was in danger the moment they touched me," Jeb Corliss explained. "If my parachute had deployed when they had their hands on me, I would have been yanked off the edge of the building, and I would have impacted the ledge about four floors down, which most likely would have killed me."

So how did the UK's first British Open BASE Jumping Championship address this problem, and how might you avoid a law suit brought by some thrill seeker who should never have been on your property and was certainly not invited in the first place? The championship was held at Swaffham (pop: approx 7,000) in Norfolk on the UK's east coast in



September 2008. The town's Ecotricity Turbine is the only wind turbine in the world with a viewing platform open to the public. Around 30 of the world's leading BASE jumpers competed in the final leg of the aptly named 'Who's the daddy' competition.

Only jumpers who had more than 100 BASE jumps were allowed to enter the championships. A bullseye, the size of a tennis-ball, tested their accurate landing skills after a very short parachute ride (8-10 seconds), marks were also awarded for presentation and style and the title was claimed by Christopher 'Doug's' McDougal, a leading Australian BASE Jumper.

Mercifully, the whole event was properly managed and supervised with safety the prime consideration for all throughout the proceedings. Contrast this, however, with what happened at the Empire State Building and it's easy to see that anyone involved in a wind turbine project needs to be well aware of the potential legislative dangers.

Only jumpers who had more than 100 BASE jumps were allowed to enter the championships. A bullseye, the size of a tennis-ball, tested their accurate landing skills after a very short parachute ride

The 31-year-old Corliss, who had previously jumped from the Eiffel Tower, the Golden Gate Bridge and the Petronas Towers in Malaysia, was arrested and charged by New York prosecutors with reckless endangerment – a felony. All of which would seem logical and legal enough. But, as it turned out, there is no law in New York making it illegal to jump from buildings and in January 2007, a city judge ruled that Corliss had not acted recklessly, nor counter-intuitively, had he broken any laws.

So maybe it's time for positive action. Now could just be a good time for wind turbine operators to seriously think about organising properly-managed BASE events, inviting the top jumpers and daredevils from around the world to participate and join in the fun. All of which has to be a viable alternative to having these people jumping, unbidden, from turbines around the US, risking potentially life-threatening injuries and engendering more adverse publicity for a sector of the power industry that needs all the positive publicity it can, well, generate. ▴