



Paul Blezard struggles to get his arthritic leg over a pair of lightweight but rather tall Swedish Cakes

first saw an example of a Cake electric motorcycle at the last BikeShed Show at Tobacco Dock, east London, way back in May 2019. The organisers had presciently set aside a whole room for electric machinery and the Swedish machine was mixed in with the hub-centre-steered but ill-fated £90,000 ARC, the £40,000 'V-twin' Veitis, a £40,000 Belgian Saréola, several custom-painted Zeroes and a couple of lightweight one-offs. In that company, the Öhlinsequipped Scandinavian machine seemed almost cheap at 'only' eleven grand but it was in motocross trim and didn't even have a sidestand, let alone lights. However, the Swedish gentlemen with it assured me that a roadlegal version was on the way, and so it proved.

First impressions were: striking, 'designer-esque' but very angular; lightweight, but very tall; small battery. Like the Zero DSRs I'm most familiar with, the Cake has its battery size in kilowatt hours emblazoned on its side. But whereas the Zeroes proudly display 14.4 kWh

in big numerals, the Cake had just 2.6 written in white on its battery... Furthermore, I knew that the cheap n'cheerful £3,000 SuperSoco electric moped I'd ridden across London to the event was equipped with a 1.8 kWh battery and had room for a second, to double its range.

Six months earlier I'd bumped into an old schoolfriend I hadn't seen for decades. Turned out Simon was still into motorcycles and we kept in touch. Last year he told me that another motorcycle enthusiast friend of his had recently signed up to become one of only two Cake dealers in the country. And so it was that I found myself at Lee Robinson's place in Guildford at the end of May, with both versions of Cake's street-legal trail bikes lined up for testing on the byways of the Surrey Hills. In the meantime, last September, I'd also seen an episode of the online electric vehicle TV programme, Fully Charged, in which Scotsman Andy Torbet tested both the OR off-road only Cake and a street-legal one. It



was all very positive and beautifully shot, but the seat still looked very high, especially on the road, and when Alvin the 6ft Swede said "Anyone can ride it" I thought, what if you're a 5ft2" woman, or a knackered old git like me, with arthritic hips? You'd need a mounting block! And so it proved!

The Cakes certainly look classy when they're nice'n clean and shiny. The Swedes make great play of the fact that while the machines have something in common with mountain bikes, their parts are all much beefier, yet are much lighter than those of conventional motorcycles: 'All parts and components are developed from scratch to keep the weight down, with highest possible performance. Everything from the rims, hubs and stems to the custom Öhlins suspension is engineered and dimensioned specifically for the Kalk and this new category: lightweight electric motorbikes.'

Before we set off, Lee gave me a brief rundown on the difference between the two machines and their rather bizarre model designation. Kalk means 'lime' in Swedish, by the way. The black bike is the Kalk INK&, and is the basic, street-legal trail bike, costing £9,000. The white Kalk& is the Öhlins-equipped version, which also has different wheels and costs a full three grand more at £12,000 but weighs 4kgs less, (79kg compared to 83kg for the still very light INK&). The wheels are

19-inchers at both ends, incidentally, and come with Cake's own design of 'Trail Saver' tyres, whose tread reminded me of US flat track hoops, but much skinnier, at only 3-inches wide. Both machines come with lights, indicators, steering lock and a pair of mirrors, plus a spindly sidestand, of which more anon...

As we headed for the Surrey Hills on a back road out of Guildford I was surprised by how 'roadie' the riding position felt, with much more of a lean forward than I was expecting. Within a few minutes we were at the start of the first trail, near Gomshall, and Lee re-set the modes, upping the power/speed setting from 2 to 3, and the regen braking, from 1 to 3. It struck me as slightly ironic to go from restricted power on the tarmac, to full power on the trail, when I'm used to doing the opposite on Zeroes, but the American machines are all much, much more powerful than the Cake – even their relatively light 135kg FX trail model is capable of 90mph...

Low bars, high seat

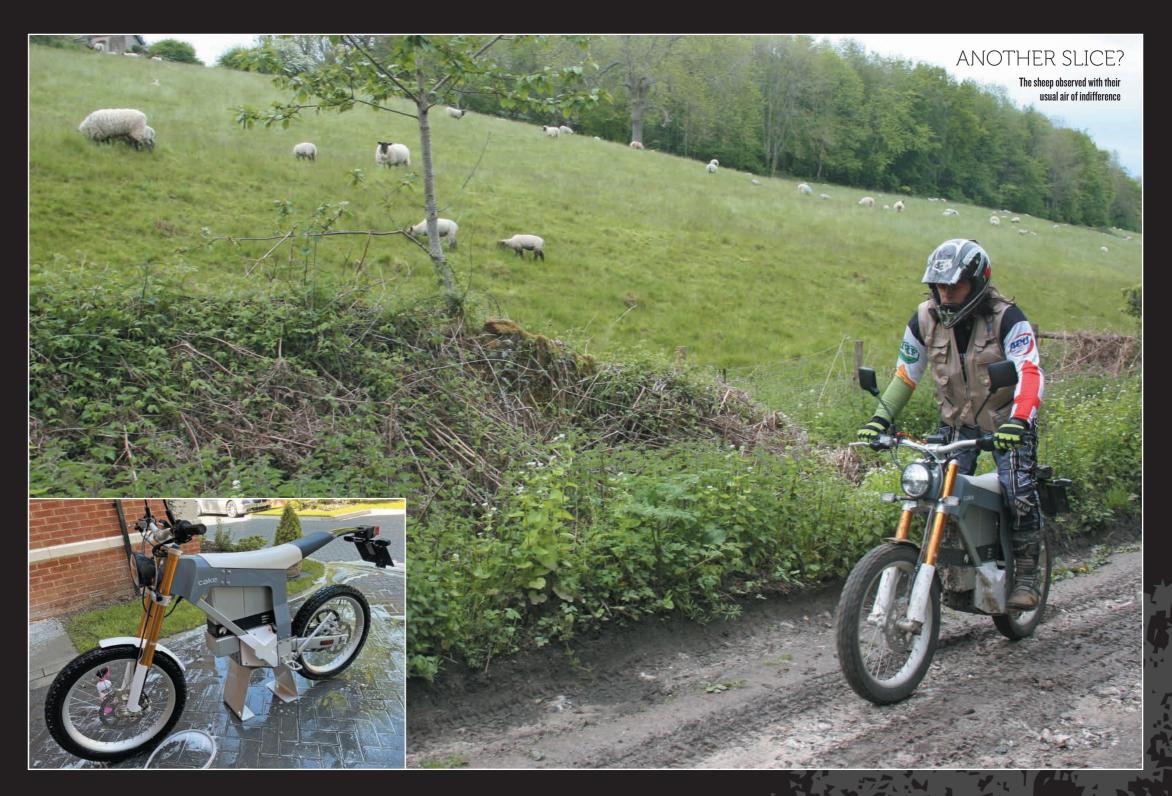
The INK& felt much more poky in Mode 3, and really light and flickable, as I led the way up the steep climb of the Hackhurst Downs but as I stood up on the pegs the lean-forward 'roadie' feel of the riding position persisted and I found myself wanting a bar-riser. Mind you, I also wanted a seat-lowerer! Whenever I







decided to stop for some photos I literally had to look for a hump to pull up alongside in order to dismount! Of course, a high seat is much less of a problem if you have a good, strong sidestand with a decent-sized foot at the end of it, so that you can put your left foot on the footpeg before swinging your right leg over the seat. Unfortunately the Cake has neither – the lightweight sidestand is more like a blunt alloy pencil, and has no foot to it whatsoever! It could have been designed to sink instantly into any ground softer than concrete. It really needs a redesign, with a large, weight-spreading foot.



While we were taking some snaps, a fellow trail rider came by on a WR450, and the contrast with the silent Swedish bikes was striking. The Yamaha wasn't outrageously loud, but it still sounded bloody noisy compared to the Cakes and I was reminded once again how much better for public relations any electric machine is compared to anything with an 'infernal' combustion engine – especially on the trail.

Thankfully the rain that had threatened at the beginning of the ride did not materialise, but there was a lot of evidence of the uncommonly wet month of May we had this year. I've ridden all the trails we did that day for four decades and I have never seen them so wet and puddle-filled. Some were almost unrecognisable from the last time I rode them. Not ideal for an electric motorcycle test, you might think – but you'd be wrong. On the contrary, both bikes kept going through the deepest puddles without missing a beat, or should that be a 'whir'? On the other hand, the black INK proved to have temperamental wiring as far as the lights and indicators were concerned. They all disappeared without warning for a while, only to return, then disappear again.

I swapped onto the Kalk&, the Öhlinsequipped bike, just before we rode the flinty, cobbly, trail known as Hogden's Lane which leads up to Polesden Lacey. The dash layout was different, but the mode choice the same. One slightly irritating aspect is that unless you're happy to ride in moped mode with no regen you have to reset the modes every time you restart, although it only takes a couple of seconds. Upping the regen from 1 to 3 makes a hell of a difference, rendering the disc brakes almost redundant in most situations on both road and trail – just shut off to slow down and twist again to go. It's like the difference

20 Trail Summer 2021 **Trail** Summer 2021 **21**







between the engine braking of a 125 2-stroke compared to a 600 4-stroke thumper.

The Öhlins suspension definitely felt more 'plush' but not three grand's worth more and I have a feeling the INK's slightly clunking suspension could be improved for a lot less dosh than that. Then again, we were taking it steady in a responsible TRF fashion; I dare say that if you were 'pressing on' in enduro special test style, you'd appreciate the difference more. In fact, if you want to see what an Öhlins-equipped Cake OR can do in the hands of a top class rider, there's a great YouTube video with brilliant on-board footage of works Yamaha rider Robert Kvarnstrom passing all and sundry in the Gotland Enduro and setting the 5th fastest time out of 118 mostly petrol-powered riders: https://www.youtube.com/watch?v=NM0-*AGvpUdQ*

Learner's Puddle Test

I actually gave the Kalk& an unintended test of waterproofing when I managed to drop it in one of the biggest puddles on Hogden's Lane – a beginner's error due to optimistically trying to change ruts in a foot of water. Definitely my wettest prang in 40 years of dirt

riding and all captured on video by Lee's Go Pro! The bike was completely unscathed apart from the loss of the toe-piece from the rear brake. It's cleverly designed as a separate, bolton part, so the bolt snaps, you retrieve the toe-piece and refit it with a new bolt. A neat piece of design that contrasts with the flippin' useless footless sidestand on the other side of the bike. Unfortunately the toe-piece disappeared into the puddle and I didn't notice it was missing until some while later another neat aspect is that the footbrake is still perfectly useable without it since the whole length of the brake arm remains in place, intact and unbent. Both mirrors survived intact too, and they give good rear vision on the road, although hinged, foldaway ones would make more sense on such a trail-capable machine.

Talking of learners, it was shortly after this incident that we bumped into a learner trail rider called Kaya who'd ridden the twenty-odd miles out from South West London to discover the Surrey byways. It was great to hear him talk with enthusiasm about the joys of trail riding and how he was planning to move up to a more powerful machine as soon as he passed his test. At 32, he was actually not that

young, and had been riding on CBTs for a decade, but had only just discovered the delights of 'green roads'. He had heard of the TRF though, and said he planned to join us soon. The TRF – and motorcycling in general – need more like him!

CBT-Compatible

All the Cake models are A1 licence-legal, like a 125, with a claimed (continuous) power output of 10kW (13.5bhp) for the road-legal bikes and 11kW (15bhp) for the off-road-only OR machines. Torque is a gutsy 42Nm (30lbft) for both, which is only one less than the heavier KTM FreerideE. And remember, as all EV nerds know by now, peak power is always much more than the continuous figure. In fact, in the US market where they don't have any of the learner restrictions we have in Europe, the figures Cake claimed were only 9kW continuous, but 15kW or 20bhp peak. For comparison, a Honda CRF250L has 23bhp, but only 22Nm – barely half – the torque, and at 144kg, weighs nearly twice as much as the Cakes! And of course, the electric bikes are all 'twist and go', so there's no clutch or gears to worry about. In fact the OR models come with the rear brake on the left handlebar which, being used to both Zeroes and maxiscooters, would be my preference for the road-legal models too.

It started to rain as we rode down the A246 for a couple of miles, and I began to wish I'd worn my jacket but by the time we got to the next pair of trails it had stopped and I remembered that the last time I'd ridden them I'd been searching for clues in the Surrey Rally of Discovery on Carla McKenzie's Zero DSR, which she kindly lent me for the event. We got a couple of nice scenic shots and Lee managed to pop a couple of respectable wheelies. If you look on t'internet you'll find photos and videos of skilful fearless folk putting Cakes completely vertical on the back wheel with no trouble at all.

Slippery when wet...

I'm a lot less 'gung ho' than I used to be, but when Lee suggested that it might be a good idea to miss out the last long trail he'd planned, since it included a gnarly descent on what would now be wet chalk, and that he and our friend Simon had both fallen off last time they went down it on the Cakes, I said,

Battery Size Matters – And so does the PIMG

ight now, in 2021, a 2.6kWh battery is really rather small, especially on a £9,000 bike, no matter how light it is. And it's one of the reasons that it is so light of course. There are lots of electric two wheelers with a lot more battery for a lot less money, and they're not all made in China either. Take the Spanish Silence SO1 maxiscooter, for example: 62mph (claimed) top speed and a quick-release 5.6kWh battery pack, more than double the Cake's capacity, all for £4,995. Mind you, that's with the UK government's Plug-in Motorcycle Grant (PIMG), worth £1500. The Cakes should be able to get approval as soon as someone at the company gets around to doing the necessary paperwork, which would bring the price down to a much more tolerable £7.500.

In stark contrast, the KTM FreerideE is not eligible for the grant, due to its crazy 'ready to race' one-month warranty, even though the battery pack itself is guaranteed for the necessary three years! So unless that changes, the KTM, with its 3.9kWh battery pack, will stay at £10,399 when it could cost less than £9,000, Yet the rip-snorting (but heavier) Zero FXS, with its 7.2 kWh pack, (nearly twice as much as the KTM, and nearly three times that of the Cake), comes in at a bargain £10,045 with the grant.





'Nah, let's do it'. After all, I'd ridden down that trail on my GS1150 back in the early noughties, how hard could it be on a featherweight electric bike with stonking regen braking? The answer is...more difficult than I'd expected! I stopped about half way down, before the really tricky section, and discovered that Lee had already fallen off behind me. When he restarted, I waved him past and promptly dropped the Kalk& as the back end slipped away beneath me on a super-slippery ridge between two ruts. I'm going to put some of the blame on the shallow-treaded 'Trailsaver' tyres, which were definitely out of their comfort zone on wet chalk. However, you may conclude that I'm just an incompetent old has-been-who-never-was!

Of course, one of the great joys of a really light bike is the ease with which you can pick it up on your own, as I discovered with the even lighter Sur-ron that I dropped several times while testing it last year! Unlike the Sur-ron however, which has a seat even lower than a Serow's, the Cake's high seat makes simple paddling much harder and it's not as if all that seat height comes with lots of nice, comfy padding either. The Cake seats really are like the proverbial plank, and actually feel wider than they look. As any short-arse will tell you, seat width is as important as height when it comes to getting your feet down onto terra firma.

That last tricky trail comes out in the village

of Shere and we stopped for an outdoor beer at The William Bray hostelry around the corner – my first pub pint of 2021! The two Swedish machines attracted a lot of interest from passing customers, several of whom admitted they weren't aware that electric motorcycles even existed. They all liked the idea of the silent running, even the guy who reminisced about British bikes from half a century ago.

Range Limitation

On the last few miles back to Guildford we touched 50mph, briefly, for the first time all day (claimed top speed is 56mph) and by the time we got back to base the battery indicator was showing empty, with exactly 30 miles covered. Bearing in mind that we'd been riding gently on backroads and byways, with very little full-throttle thraping, I think Cake's claim of 'up to 50 miles' of riding from that 2.6kWh battery is optimistic, to say the least. You would have to ride at the 15mph (25kph) assisted legal limit of an electric mountain bike to achieve it, in my opinion, whereas Cake strongly imply that you could go 50 miles, or three hours, in Mode 1 at the 28mph(45kph) moped limit. Frankly, I haven't got the patience to check – I'd much rather ride the Cake in full power Mode 3 all the time, and doing that, you'll have to avoid thrashing it to get even 30 miles.

The best range Lee has managed so far is 34

20 Trail Summer 2021 **Trail** Summer 2021 **21**



miles while reconnoitring the route for the forthcoming London to Brighton Electric Vehicle Rally. He's confident his Cake will make it the full 50-something miles with a battery swap at the half-way point, which seems entirely reasonable. Cake claim that the battery can be swapped in 90 seconds, but Lee said that it's a pretty fiddly operation and he's actually modified the slotting system to make it easier. It definitely can't be done with the ease of a KTM FreerideE battery swap, which I have seen done with my own eyes in a matter of seconds. It's easier on the cheap'n'cheeful SuperSocos and Sur-rons too, for that matter. Then again, you need to know that a spare battery for a Cake will set you back three grand (€3,500) which is pricey by any standards. (KTM's FreerideE battery unit costs €4,000, but it's 50% bigger in capacity -3.9kWh vs 2.6kWh for the Cake.)

Also, it's worth bearing in mind that both the KTM and Zero have built-in chargers, whereas the Cake's is separate, like an electric bicycle's, so has to be carried around on your person if you want to charge away from base. Small batteries mean quicker charge times of course, which is why the Cake can be recharged from 'empty' to 80% in 'only' two hours, and to full in three from a normal

13amp socket. But battery capacity equals range, just like the size of a petrol bike's fuel tank. The only snag is those hours rather than minutes it takes to 'fill up' – unless you've got a spare battery pack to hand. It follows that the Cake, like the KTM, is perfectly capable of competing with petrol-powered machines on a closed course (or non-competitive trail park) where a lap isn't too long and you can swap the battery while others pour old-fashioned and highly flammable fuel into their tanks.

Personally, I would advise the Swedes to redesign their road-legal machines so that they can slot in a second battery, if required, which would double the range at a stroke without adding too much weight – they would still only weigh 100kg even with 5.2kWh of battery, compared to the KTM's 110kg with 3.9kWh. They need to add a few more grammes for a sturdier sidestand of course, and an on-board charger would be good too. And a more off-road riding position, ironically, with at least the option of a bar riser. If they really want to widen their machines' appeal, they need to bring out a 'Serow-style' version with a seat that's at least four inches lower! Finally I'd change the model names to something that doesn't look like a typographical error!

CONCLUSION

As they stand now, the Cake Kalk& and the INK& are wonderfully light, road-legal, dirt-capable trailbikes that are great fun to ride, but their range is distinctly limited and their seats are very high and somewhat uncomfortable. You're paying a high premium for that lovely CNC-machined aluminium and light weight, especially for the Öhlins-equipped model, and especially without the £1500 plug-in grant. My racing days are definitely over, so I really hope they'll make a lower, more comfortable, longer-range version soon!

Huge thanks to Lee Robinson for a thoroughly enjoyable day out, and for help with the photography.

Website: leebikes.com
Email: lee.robinson@leebikes.com
Cake website: ridecake.com

Cake test on Fully Charged:

https://fullycharged.show/episodes/cake-motorbikes-all-electric-no-ice/

On YouTube:

Cake OR in Gotland Enduro: https://www.youtube.com/watch?v= NM0-AGvpUdQ