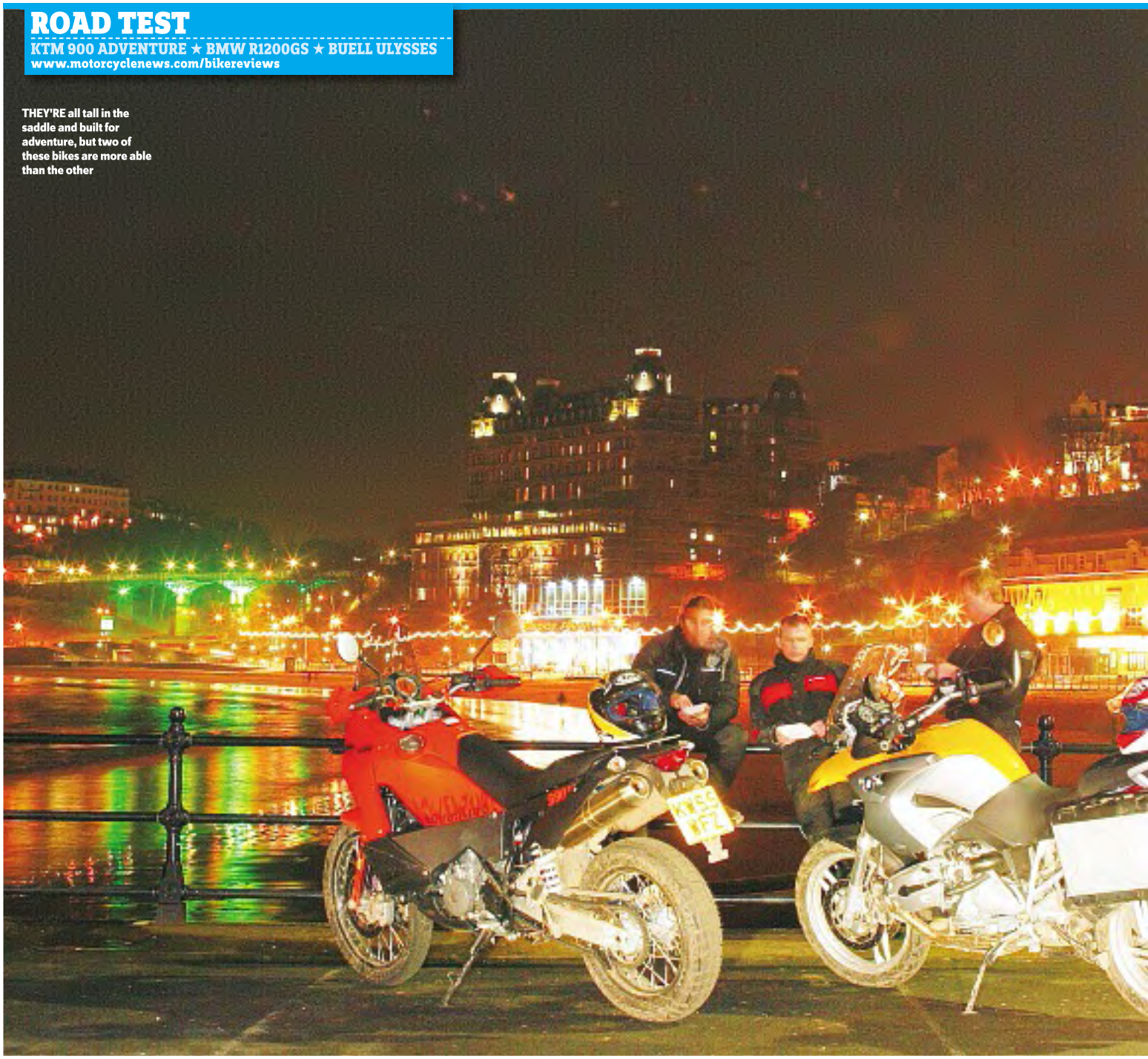


THEY'RE all tall in the saddle and built for adventure, but two of these bikes are more able than the other

TALL ORDER

Last week we brought you the world-first test of the new KTM 990 Adventure. Now we see how it fares against BMW's class-leading R1200GS and Buell's all-new Ulysses

BY ADAM CHILD **PICTURES BY** MARK MANNING

BMW'S GS, in its many guises over the years, has always been popular – even more so since its rise to stardom in the hands of Ewan McGregor and Charley Boorman. It's the benchmark adventure bike. So can the updated KTM Adventure 990 (with fuel injection and 40cc extra for 2006) finally snatch its crown, and where does the oddball Buell Ulysses fit into the equation?

The Ulysses, launched last year, is the American company's first attempt at this sort of bike and has an impressive spec, including belt drive and rim-mounted disc brakes. But is that enough to rival these two proven thoroughbreds?

To find out, we treated the bikes to some serious miles on and off-road across the UK. We then spent a full day blasting around some of Britain's most breathtaking roads in North Yorkshire, staying overnight in Scarborough. Here's how the bikes fared…

LONG-DISTANCE ABILITY

IT'S a midweek morning, the Buell is parked outside, I've a 90-mile commute to work (yes, I live 90 miles from the office) and I'm running late – again! Usually time can be made up at such times by stepping up the pace. But as I turn on to the M62 ready for the M18/A1 blast, it quickly becomes clear that a sustained 100mph will be almost impossible on the Ulysses.

At three-figure speeds the wind blast is unbearable. The Buell's low screen offers virtually no weather protection (although a higher screen is available as an option) so you've no choice but to hang on and brace yourself. The lack of protection means the winter wind cuts through my riding kit and the hand guards are near useless. After half an hour I can no longer feel my hands.

To make things even worse, at around 100mph a weave starts to set in – and by 110mph it's becoming slightly alarming. One hour in and it's turning into one of the worst journeys I can remember, so I stop to warm my hands on the exhaust.

Cruising at 80mph is bearable – but only just. In short, you'd probably prefer to be Gary Glitter's cell-mate than take the Buell touring in winter!

By sharp contrast, the BMW is so much better than the Buell it's hard to believe the two bikes are aimed at the same market. At 95mph, the flat-twin motor is turning over at a steady, easy 5500rpm. The riding position is natural and comfortable, with

IN order of comfort, we have: BMW, KTM, Buell

THE KTM is the funster of the pack

wide bars, an extremely comfortable seat and a digital instrument panel which gives you all the information you'll ever need – including how much fuel you've got left.

The BMW's tank range is massive, with 200 miles possible between fill-ups if you take it steady. And steady is comfortable, too, thanks to that plush seat and a screen that is effective and adjustable.

On the down side, the BM's pegs are slightly higher than the KTM's, meaning it's less roomy and comfortable over distance for taller riders. Also, air seems to pass around the headlight and top fairing, resulting in wind rushing around your lower body. Not great in winter, but it is bearable. It's easy to see why the GS is so popular for long distance touring.

Although the KTM's 990cc V-twin powerplant is very different to the BMW's 1200cc boxer, 95mph turns up at the same 5500rpm in top. And, as with the GS, you can sit there all day. The hand guards keep your mitts out of the cold and the riding position is comfy (especially for taller riders). On the down side, the seat is thin and lacks the plushness of either the BMW or Buell, although the KTM's weather protection is the best of the bunch. So much so that, at 70mph, you can ride with your visor up – without your eyes streaming like an Oscar winner halfway through an acceptance speech.

After around 140-150 miles, you'll want to start looking for fuel; reserve should last you another 30 miles. The KTM's twin filler caps fill twin tanks - but they're connected by a pipe in the middle.

PERFORMANCE/ FUN FACTOR

AFTER heading back up north en masse, we turn off the M62 near Howden and begin the fast ride to Scarborough.

I've been riding these roads almost every summer weekend for the last 10 years and could probably ride them blindfold – and, to be honest, I might as well be doing that now. The Buell's headlights are a joke – we'd be better off using the light off my mobile. Main beam isn't much better, and trying to attack the fast section from Driffield to Staxton is scary – even for a local like myself.

The high-speed weave remains apparent on these roads and worsens when surface conditions deteriorate. Long, 100mph sweepers are heart-in-the-mouth affairs. It's as if someone at Buell has replaced the fork springs with a Slinky. There's no damping at all, and overall they are way too soft. If you hit the brakes hard, the front end begins to bury itself into the tarmac as if digging for gold, while the headlight ends up illuminating nothing more than a few feet in front.

Engine-wise, the Buell's big Harley-replica, air-cooled 1200cc V-twin certainly has some grunt and sounds impressively potent. It's enough to lift the front in first or second gear with the merest whiff of clutch (although the bike's stumpy wheelbase has a hand in this, too). But it's still no match for the other two.

Flat-out, the KTM and Beemer start to romp ahead and, even though I know the road like the back of my hand and ride as hard as I dare, on the Buell I simply can't

Continues over

ALL of these bikes come into their own on North Yorkshire's roads

KTM is just as much fun off the road as on it

From previous page

keep up. The road from Pickering to Whitby is flat-out in places and the Buell struggles, especially when trying to catch the other two uphill.

By comparison, the BMW is far quicker than it looks. It takes everything in its stride and it's only when you look down at the speedo that you realise how effortlessly quick it is.

Despite its huge dimensions, you can take the GS down twisty back roads with confidence. The handling is secure and steady, there's no weaving or bar-shaking and it just gets on with the job. There's no dive from the Telelever font suspension when you're hard on the brakes – which takes some getting used to, especially after riding the comical Buell. At the rear, the Paralever shaft-drive/suspension system delivers grip whatever the conditions, with the Dunlop tyres offering excellent feel, especially in the wet.

If there's one criticism of the BM, it's that it's a little soul-less. While riding some of the best roads in the UK, the GS almost sterilised the experience. The motor never felt it was working its heart out. The front never lifted and ABS took care of all the braking. It all felt a bit uninvolving. If you're an inexperienced rider, that may be just what you want – but if you crave fun by the bucketload, head for the orange bike.

During the test, just before every fast road section a small fight would break out for the KTM's keys – it's just so much more fun than the BMW, and comparing it to the Buell would be like comparing Man United with Doncaster Rovers.

The Adventure's V-twin motor spins up quickly and delivers loads of grunt. The front lifts easily in the first two gears and it pulls strongly – even above 100mph. The KTM also sounds gorgeous – almost Ducati-like – and the motor offers loads of engine braking. All the way through the gears the KTM has the BMW beaten. The GS only wins (thanks to its extra cubes) when you do roll-on acceleration comparisons in top gear.

The KTM's ABS-assisted Brembo brakes are excellent, too, offering loads of feel and power. However, the back brake started to fade on the third day of testing until, to our concern, it almost stopped working after very heavy use.

Its more off-road-biased tyres don't offer the same amount of grip as the BMW's Dunlops and can be provoked into

KTM WINS THE OFF-ROAD CONTEST

ALTHOUGH 95% of owners will probably never venture off road with these bikes, it's still a part of their make-up.

The Buell takes this aspect the least seriously of our threesome and, to be honest, anything more than a gravelly pub car park leaves it struggling. The front forks' sogginess hides any sense of grip. The intermittent fuelling causes problems – it's hard to accelerate without the rear spinning, it's top heavy, the steering lock is poor and a grabby front brake means a low speed spill is inevitable off-road.

The GS is much more suited to the dirt. Sure, it's heavy, but the front seems to find its way. Like with the KTM, the BM's ABS can be switched off on the dirt and, in the right hands, the GS is semi-decent on gentle trails. But I was always conscious of the possibility of damaging the cylinder heads on rocks – if it were to fall over, it looked like an ankle-breaker.

Instead, I was much more at home on the KTM. It's purpose-built for the dirt, and even with my limited skill I was happy to try a few tracks I wouldn't contemplate on the other two. There's plenty of feel through the front and you can happily get the rear spinning and fish-tailing if the mood takes you. In summer, down a forest track, the KTM would be just as much fun off-road as on.

BEEMER is OK on the dirt

'You can really throw the Adventure around and have fun, whatever the conditions'

BUELL'S grunty engine will lift the front with no problem

spinning in the wet; but 99% of the time they're fine. The KTM's taller, up-against-the-tank, almost supermoto-like riding position also means you can really throw the Adventure around and have fun, no matter what the conditions.

PRACTICALITY/EQUIPMENT

AS I'm only 5'6", the over-tall and wide seat of the Buell may have been the comfiest of the bunch, but it makes life far too awkward when trying slow manoeuvres. I could never get both feet on the ground and always struggled to pedal it backwards. The lack of steering lock hinders low-speed handling even further – it's got the turning circle of an oil tanker.

There's worse, too. Around town the inadequacies of the Buell's poorly set-up fuel injection system is much more noticeable than when cruising with an open throttle – especially when the engine's cold. The first time I rode it from cold, I thought it was running out of fuel!

By contrast, you could run the BMW for years through winter and it would still wash up a treat every time. The bulletproof mechanicals mean it will out-last most boy bands and the options list is huge. Our test bike came with BMW panniers – not cheap at £528, but quality pieces of kit.

The KTM is laden with quality names, too: Renthal bars, fully-adjustable WP suspension, Brembo brakes and more. After some heavy off-roading, it still came up looking like new – and from past experience it can take the odd low-speed spill.

It's no match for the BMW's solid build though – our KTM's starter motor made a terrible mechanical noise a few times and the rear brake faded badly after some very hard riding.

THE OVERALL VERDICT

THE Buell gets the wooden spoon – it's simply out-classed by the other two. It's not the best for touring, it's no good off road, its fuelling isn't the best, it has a comical front end and poor headlights, it's too tall, it has a restricted steering lock and its build quality isn't up to scratch.

In fact it's hard to think of a positive aspect. OK, it steers sweetly on road, sounds good and is nicely torquey, but that's about it.

The KTM and BMW are much more evenly matched. It all depends on what you want from a bike. If you're planning 20,000-plus miles a year, want something that will hold its money and still look like new in a few years it has to be the BMW.

However, if you just want a capable tourer, will cover less than 20,000 miles a year, will only keep it a few years and want something fun when the mood takes you, go for the KTM. It does almost all the BMW can do – and is better than it off-road – but just offers a few more giggles per pound.

YOU want fun? You need the KTM then

SECOND OPINION

Jamie Rule, 44, experienced 16-stone, 6' 1" rider

THE KTM is just so much more fun than the rest. It handles well, the engine is great – almost like a sports bike's. It has a good gearbox and brakes, handles great for a big bike and is just as comfy as the BMW. The BM comes second, in my book. It's a very good bike and has a refined ride, but I didn't like the gearbox; the gearchanges weren't as quick as I wanted and it hasn't got the 'attack' fun factor of the KTM.

The Buell is last. In my opinion, it's a poor attempt to enter this competitive market where customers really know what they want. It just doesn't come close to the others.

BMW R1200GS

★★★★☆

COST:	£8715
POWER:	93bhp
TORQUE:	74ftlb
WEIGHT:	199kg

Availability: Now
Colours: Blue, Red, Yellow
New for 2006: Unchanged
Insurance group: 13 (of 17)
Info: BMW UK 0800-777119

TECHNICAL SPEC

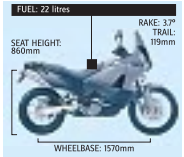
Engine: Air-cooled 1170cc (101 x 73mm) four-stroke flat-twin. Fuel injection. Six gears.
Chassis: Engine as stressed member with steel sub-frames. Telelever front suspension, adjustable for preload. Single rear shock, adjustable for preload and rebound damping. Brakes: 2 x 305mm front discs with four-piston calipers. 265mm rear disc with twin-piston caliper. Tyres: 110/90 x 19 front, 150/70 x 17 rear.

KTM 990 ADVENTURE

★★★★½

COST:	£8695
POWER:	88.4bhp
TORQUE:	61.5ftlb
WEIGHT:	199kg

Availability: End of Feb
Colours: Orange, black, (blue S model)
New for 2006: New model
Insurance group: 13 (of 17)
Info: KTM UK, 01280-709500



TECHNICAL SPEC

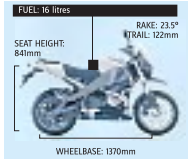
Engine: Liquid-cooled 999cc (101 x 62.4mm) dohc four-stroke V-twin. Fuel injection. Six gears.
Chassis: Steel trellis frame. WP 48mm upside-down forks, fully adjustable. WP single rear shock, fully adjustable. Brakes: 2 x 300mm front discs with two-piston calipers. 240mm rear disc with twin-piston caliper. Tyres: 90/90 x 21 front, 150/70 x 18 rear.

BUELL ULYSSES

★★★☆☆

COST:	£8195
POWER:	86.3bhp
TORQUE:	69.7ftlb
WEIGHT:	199kg

Availability: Now
Colours: Orange, black
New for 2006: New model
Insurance group: 16 (of 17)
Info: Buell UK, 0870-904-9984



TECHNICAL SPEC

Engine: Air-cooled 1203cc (88.9 x 96.8mm) ohv four-stroke V-twin. Fuel injection. Six gears.
Chassis: Aluminium beam frame. 43mm upside-down forks, fully adjustable. Single rear shock, fully adjustable. Brakes: 375mm front disc with six-piston caliper. 240mm rear disc with twin-piston caliper. Tyres: 120/70 x 17 front, 180/55 x 17 rear.

TECHWATCH

BY KEVIN ASH

SYNTHETIC oil has a much more consistent structure than mineral oil

Is synthetic so much better?

WITH synthetic engine oil costing two or three times as much as mineral oil, you've no doubt wondered exactly what benefit you get from paying the extra, and if you're likely to recoup it in other ways – surely using mineral oil and changing it twice as often would be just as good?

Standard mineral lubricant uses a base oil derived from crude, while synthetic is created by a chemical process which builds it up from chains of carbon and hydrogen atoms. Because this is fully controlled, the chains are all the same length, which gives the oil very consistent qualities. A mineral oil is naturally occurring, so it contains a variety of lengths of molecules, which makes it less stable. At higher temperatures, for example, the shorter molecules evaporate, changing the constituency of the oil, while at low temperatures the longer molecules and the waxes which occur naturally prevent it from flowing so well.

In practical terms, this means a synthetic oil has a much wider useful operating temperature range. Where a mineral oil can start to be affected above 180° C, a synthetic is stable up to around 320° C. Engines, especially air-cooled ones, inevitably have hot spots which reach these levels, and synthetics are less affected by them.

Just as useful in the winter is the way a synthetic keeps flowing easily at very low temperatures, giving an engine much better protection during start-up on cold winter mornings, when most engine wear occurs. The consistency of synthetics means they have fewer additives and impurities, so engines stay cleaner on the inside.

But with riders covering only a few thousand miles a year, a lot of this is academic – few are bothered if their engine will last 120,000 miles instead of 80,000. More relevantly, synthetics offer better performance thanks to their superior lubricating qualities (again, down to the consistency of their molecular structure). The molecules slide over each other more easily, while the longer molecules in mineral oils can become entangled. This means reduced friction in an engine, which releases more power to the back wheel – sometimes even enough to be noticed!

But the way in which a

'Synthetic oil keeps flowing easily'

synthetic can most obviously repay its higher cost comes at service time. Synthetics generally last two to five times longer than equivalent mineral oils, so in theory you could safely double your oil-change intervals, saving money – and cutting down on waste oil. In practice, this is likely to invalidate your warranty, or the value of your bike, as prospective buyers may not be convinced.

If you change your oil more frequently than the manufacturer's recommended intervals, as many riders do, using synthetic means you no longer have to bother – the oil will work fine throughout the full interval. This is the best way for synthetic to pay for itself.

Note: You shouldn't use synthetic for a bike's first 5000 miles, but it's a myth that you can't mix it with other oils. You can, but its advantages are diluted.