

WORCESTER AND HEREFORD ADVANCED MOTORCYCLISTS



May 2023



EDITORIAL

Ah, the joys of spring! Well, perhaps, if you happen to look at the right moment; current shock views of frost on the ground in the morning are none too encouraging but doubtless better days are at hand.. I've even gone so far as to get the Hardly Ableson MOTed and taxed, if that isn't a triumph of optimism over reality then I don't know what is!

While we wait, what better way to pass the time than enjoying this latest issue of our own newsletter; this month we have, of course, the [Chairmans Chat](#) from Richard Hewitt and an [Ode to breakfasts from Chief Observer Alex Hoyle](#). I've also been able to persuade [Donna Saxton to give us her viewpoint on biking](#) in what is still a predominantly blokeish world.

Do you know how motorcycles really steer? It's not so simple as you might imagine what with all the balancing of forces that has to happen to allow us to corner; I found a great [IAM piece](#) that goes into all that in detail, very interesting.. Included here is a short extract from it, I'll be including more interesting bits from this rather long article in the coming issues. Here's a little tip about riding position: "You achieve precise steering with the balls of your feet on the footpegs, loose arms bent at the elbow, a relaxed grip at the handlebar and your body leaning slightly forward. A swerve succeeds only if you are correctly anchored as well as your torso and arms in the proper position. Your arms and grip must be relaxed for the bike to be stable, Done correctly, you will sense that you hardly need to hold on to the handlebar at all, if it were not for throttle control. Without an 'anchored push' much of the power in a steering command will be spent pushing your body backwards rather than the bar forwards. In a slight forward crouch, you can tension your abdomen muscles, weight the outer peg and transfer the steering power effectively to the handlebar. In normal bends, this steering command is a subtle, progressive push. But the higher the speed, the more force you need in your push."



Makes sense, and it's what most experienced riders do instinctively.. but may not have put that into words.



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CHAIRMAN'S FOREWORD

Where did April go?

For the last three Sundays I have been out on the group rides meeting up with Members new and old. It is nice to see folk coming out of winter hibernation and also nice to soak up the banter aimed squarely in my direction for not venturing out if the temperature has been less than 7C.

I will not be doing that next Winter. It has dawned on me (yes, I can be a little slow sometimes) that the Macna heated jacket I have is well up to insulating me well down to below a temperature where ice might be a greater threat. I did try the matching heated gloves but after playing the hokey cokey with one going on/off and then the other going on/off when the other was switched back on (yes that is as confusing to read as it was to grapple with whilst riding) I've decided to press the good old handlebar muffs (queue Chambers and Furmingers guffaws) back into service as they allow the use of summer gloves giving the best feel at the controls.

So, the riding season is on!

Every Sunday now there will be a ride starting from a mix of locations expertly planned by Mr Davis, our routemaster. I sometimes see a low turnout when it is somewhere like a Woofferton start; but bear in mind whilst for the Worcester dwellers it is a 45min trek over to Woofferton, it is only about 25mins back to Worcester when we finish. This is in stark contrast to an hour and a half back to Worcester from Crossgates. I would urge you to ride out on more than the usual route you do; you will experience some different roads, which will provide greater challenge if you do not know what to expect.

There are two day runs coming up, which, for me, are the highlight of the year. You can do any number of the three 'legs' and so if there is only a morning available it is still possible to join in. Deets on the website.

Evening rides on the last week of the month around Bromyard will start soon and so for those who cannot break free on a Sunday there is an option there to ride.

And finally, the last few little touches to a new set of 'Group Riding' tools/documents are just about to receive committee approval, with a subsequent launch to all. We have had a special working group on this (who I will heap praise upon when we are all signed-off); and so, with this additional toolkit there will be little excuse for not feeling able, from a knowledge pov, to get out on a ride in 2023.

My very best!

Richard Hewitt

WHAM

Chair



The Joys of Biking in the UK

Ah, motorbike riding in the UK. It's an experience like no other. The wind in your hair (or helmet, rather), the smell of petrol in the air, and the constant fear of hitting a pothole big enough to swallow your entire bike. And let's not forget about the mandatory stop at a café.

Yes, that's right, no motorbike ride is complete without a break at a café. It's like a law or something. You could be riding along, minding your own business, and suddenly, you'll see a sign for a café, and you know what you have to do. It's like a Pavlovian response - see café, stop for tea and cake, or better still a big breakfast.

But it's not just any café that will do. Oh no, it has to be a proper biker café. You know the ones - the ones with the faded leather sofas, the smell of frying bacon, and walls adorned with pictures of motorbikes and half-naked women. It's a bit like stepping into a time machine and being transported back to the 70s, but with better coffee.

And it's not just the décor that's important, it's the clientele too. You have to be surrounded by other bikers, all wearing their leather jackets and patches, all discussing the latest modifications to their bikes. It's like a secret club, and you're not really part of it unless you've stopped at a biker café.

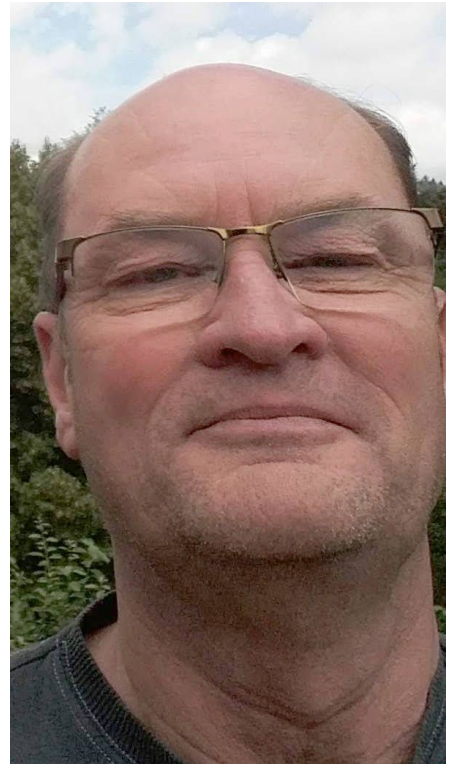
But the real fun starts when you leave the café and get back on your bike. You see, here in the UK, our roads are a little...shall we say, challenging. There are potholes the size of small countries, speed bumps that could launch you into orbit, and roundabouts that are more confusing than a Rubik's cube.

And then there's the weather. One minute it's sunny and warm, the next it's raining so hard you can't see your hand in front of your face. And don't even get me started on the wind. It's like riding through a tornado at times.

But we Brits are a hardy bunch. We laugh in the face of danger (and potholes), and we carry on regardless. We ride our bikes, we stop at cafés, and we enjoy every minute of it.

As I mentioned earlier, a biker café is a bit like a time machine. The décor is often straight out of the 70s, with tattered leather sofas and walls adorned with pictures of motorbikes and scantily clad women. But it's not just the décor that makes a biker café special - it's the people too.

You'll find all sorts of characters in a biker café, from grizzled old-timers who've been riding since before you were born, to young upstarts on the plastic fantastic who've just passed their test and are itching to hit the road. There are builders, bankers, doctors, and lawyers, all united by their love of motorbikes.



And it's not just about the bikes either. Sure, you'll see some incredible machines in a biker café, from classic British Triumphs to powerful Japanese superbikes, but it's the stories that go with them that really make the experience special.

You'll hear tales of epic journeys across the country, of breakdowns and repairs on the side of the road, and of the camaraderie that comes with being part of the biker community. You'll meet people from all walks of life, all brought together by a shared passion for two-wheeled adventure.

Of course, once you've finished your cup of tea and slice of cake, it's time to get back on the road. And in the UK, that means navigating some of those pesky potholes and the sometimes unpredictable weather conditions.

Have Fun.

Alex Chief Observer WHAM 3260

CONFIDENCE, LADY RIDERS AND BEYOND – DONNA SAXTON

As a 16yr old Yamaha Passola rider, I never questioned if it was deemed ok for me to be enjoying my freedom and squeezing every mph I could out of that little engine, so why have I, and so many other women, felt we're not worthy of riding 'a proper motorbike' as we grow older?



In my experience, the main stumbling blocks are a lack of self-confidence and the attitude of others, (both male & female). We found a great instructor in Leo from Honeybourne for our son to take his CBT with when he needed transport to get to college. I was lucky that Leo encouraged me to 'have a go' and with encouragement from Mark, my husband, I soon had the CBT in the bag & was out on the road with Kermit, my Honda Grom. 18 months later I passed my full test and, 12 months after that, I passed my IAM test and joined you lovely people in WHAM.



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In the space of 2½ years I'd gone from nothing, (apart from a 'twist & go' many moons ago), to my Z650. Fabulous! I loved it and felt proud that I'd conquered the bl***y MOD 1 & 2 and improved my riding to the IAM level. I've now ridden nearly 25,000 miles and have my lovely Ducati Scrambler 800, have achieved more than I imagined I could on the 1200 GS & Royal Enfield Himalayan off road courses and enjoyed a great IAM skills day at Mallory Park.



Yet without the encouragement of Leo, Mark, our son David, Tony Reusser and my fab female riding buddies, I couldn't have done any of it. I, like others, have felt victim to listening to outside influences that convinced me that women should not or cannot achieve so many things. There were times when I'd be out riding and nothing seemed to go right. Past comments I had received would pop into my head and knock my, already low, self-confidence - 'You ride a motorbike?', 'You're a bit old for that aren't you?' 'That bike's too powerful for you,' 'You'll kill yourself, they're really dangerous', 'Shouldn't you be on the back?', and, of course, the classic, 'Women shouldn't ride motorbikes'.

My fault for allowing this to happen? Possibly, but it's almost a brainwashing - girls play with dolls & play house, while boys do all the exciting stuff like building dens & exploring!! That's where it starts, not for all, but for the majority, so we start off on the back foot.



I've read so many times on forums where ladies have given up riding because their partners, friends or family have convinced them they shouldn't ride - with reasons that they would never give a man. A lot have passed their test and their first 'big' bike was the one their partner thought they should have and it proved to be totally unsuitable. They've instantly become frightened of it, so hardly ride and some have given up riding completely!! All that training and effort gone to unnecessary waste due to external influences & a lack of self belief.

I welcome any constructive feedback & I know I've still a lot to learn, so please continue to offer advice. However, I ask that I, nor any other women are prejudged on their riding because we have

boobs & no willy. I dearly hope, when on a Sunday ride in the future and we're all asked if we have a preference of who wants to ride with who, no one will have to hear 'Just no Women' like I did when I was the only woman there. I instantly wondered, is that what they all think? Should I even be here at all? Bang went my self-confidence and that was very nearly my last WHAM ride. I'd like to know why that particular man didn't want to ride with me, but there again, maybe I wouldn't want to ride with him if that's his attitude...^j

Levels of self-confidence vary enormously from one person to another in all aspects of life and gender. Someone with a high level of self-confidence could find it difficult to understand the dilemmas of someone with a lower level. As I'm becoming older, I've realised my self-confidence is becoming far more fragile with each passing year. Is this 'a woman thing' or do any men find the same?

Riding confidence can be shattered in an instant with an off or near miss, but can also be gradually eroded by slight mishaps or seemingly minor comments from others. I don't think this applies only to female riders. A lot of new riders, regardless of gender are very conscious of making a mistake, or not feeling they're good enough, fast enough, etc. As a group, I'd like to think we want to dispel these fears and encourage lots more riders to take their IAM training and that they, and more of our current members will join us on our Sunday rides – that said, don't let me lead... my sat nav is still not playing ball!



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Hopefully I'm correct in saying that attitudes to lady riders are slowly changing, certainly I've found the majority of WHAMers have been nothing but positive. I know there are ladies who would like to do their advanced training but see it as a daunting prospect, despite my assurances that our observers are great teachers and really nice chaps!!

I'm hoping to become an observer to bridge that gap and, in turn, be able to encourage more ladies to embark on their advanced training, but also to support anyone, any age, male, female – and everyone in between, to enjoy their riding safely, with a confidence that grows from day to day, ride by ride, because, at the end of the day, we all love biking, it's good for our soul & body.

AN EXCERPT FROM FULL CONTROL, - IAM

How do you make a motorcycle turn? In the last passage we explained how the handlebar, fork and wheel 'falls' to the right when you lean the bike to the right. The front fork geometry makes the front wheel turn when the bike is leaned over. There is another reason that leaning the bike makes the wheel turn. Motorcycle tyres, unlike car tyres, have a round profile. The circumference is thus longer around the middle of the tyre than on the shoulders. Imagine two conical drinking glasses set together like the picture shows. Set one of the glasses on its side on a table, to emulate a motorcycle tyre leaned over. Give the glass a push and watch how it turns rather than roll straight ahead. The reason is that the side with the longest circumference (the top of the glass) rolls further for each revolution. The same is true for your front tyre and this makes the tyre steer the same way that the bike leans. The front fork geometry and the tyre profile makes the bike turn automatically as soon as it is leaned over.



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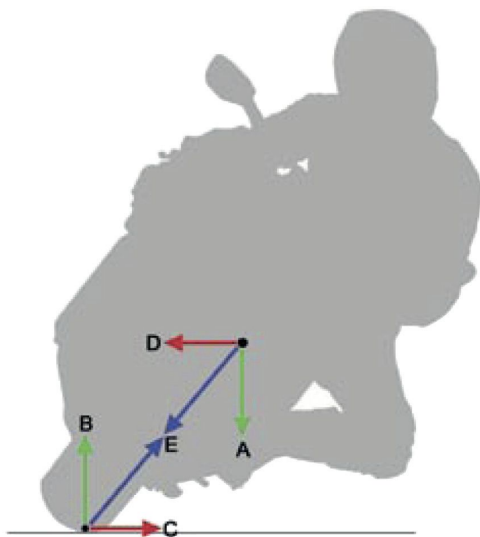


The rolling circumference decreases: The front fork geometry and the rounded profile of the tyre makes the bike turn automatically when leaned over.

Balancing act in a bend

Newton taught us that an object that is not subjected to any forces, will continue to move with the same speed and direction. If moving, it will go on straight ahead. If it is still, it will remain still. If you affect it with a force in one or other direction, the object will change course and/or speed. Imagine a motorcycle at speed. Seen from behind, when the bike is straight, the contact patches are directly under the centre of mass. It means that gravity points straight down through the contact patches and that the counterforce from the ground points straight up through the bike's centre of gravity. The machine is in balance. When the bike leans, for example to the right, the centre of mass is no longer directly above the contact point. Gravity and the counterforce from the ground still point straight down and straight up, but past each other and displaced sideways in relation to each other. The bike would have fallen, were it not for a third force working to keep it upright.

As explained earlier, when the bike leans at speed, it also turns. When the bike turns, for example to the right, Newton tells us there is a force pushing right. This sideways force 'attacks' in the contact points between tyres and ground, and since these are far below the centre of mass, impels the motorcycle to 'fall' toward the left (read: straighten up). When the force that impels the bike to 'fall' to the left (sideways force) and the force that tries to make the bike fall to the right are equal, the motorcycle is in balance in the bend. Given balance and constant speed, the motorcycle will travel in a perfect circle. If you didn't have to control the throttle with your right hand, you could have let go of the handlebar and followed the bike through a perfect bend.



Forces at work in a curve: when the forces that try to tilt the bike to the left (sideways force) and to the right (gravity) balance each other, the motorcycle is in balance.

Green arrow A: Gravity

Green arrow B: Counterforce from the ground

Red arrow C: A sideways force that attacks the tyres in the contact patch

Red arrow D: 'Centrifugal force', a force you 'feel', as a result of sideways acceleration in a curve

Blue arrow E: The sum of the forces equals balance

How do you initiate a turn?

To make the front wheel steer the way you want it to go, it follows therefore that you must first lean the bike over. This is absolutely necessary to make a motorcycle turn. Thus, if you are scared to lean, you are in fact scared to turn. A bit unfortunate, isn't it, if the road curves? So how do you make the bike lean over? It may be done by body language, to move your own body relative to the bike, to one side or the other. We emphasise, however, that this is a very slow and imprecise way of steering that results in long, slow 'banana-turns'.

A far more efficient way to initiate a turn is to give a short push on the handlebar, on the same side that you wish to turn. This push makes the front wheel steer away from the wanted direction. The contact patch of the front wheel moves away from the general direction of the rest of the bike. This makes the bike swivel around its own centre of mass, and lean into the desired bend. Elegant, isn't it? Gyroscopic forces also contribute in this 'opposite' steering movement. You can try it for yourself: Take off the front wheel on your pedal cycle. Grip the wheel by the front axle and hold it out before you with straight arms. Get a friend to help you spin the wheel so it turns fast in the direction it would turn if you rode the bike. Now move the wheel straight up and down in a vertical plane. No problem, right? Next try to steer the wheel to the left as if you steered with the handlebar. Can you feel that the wheel reacts with a powerful cant to the right? This phenomenon is called gyroscopic precession.

If you initiate a bend with a small movement steering the opposite way to that where you intend to go, you

immediately achieve the lean you need in order to turn the correct way. This steering technique is called.....

Counter (or Positive) steering

Counter in this context means 'opposite'.

Countersteering means that you, for a short moment, in fact steer in the opposite direction to that which you want. This short, opposite steering movement effectively makes the bike lean to the side you want to turn. We have already stated that leaning is absolutely necessary in order to turn any two-wheeled vehicle. The countersteering is performed by giving a push forward on the handlebar on the side that you intend to turn. If you want to turn right, you give a short, precise push forward on the right handlebar. If you intend to turn left, you give a short push on the left handlebar. We call this 'push' a steering command henceforth – a 'positive' action.

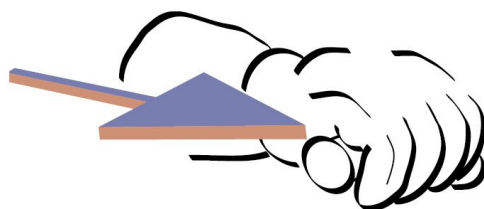
Conscious countersteering is by far the most effective way of steering a motorcycle. Immeasurably more effective than the 'body language technique', where you try to make the bike lean and turn by moving your body to the side.

You can always use countersteering to change the direction of the motorcycle – presuming your bike moves at more than walking pace. It is, however, extremely important that you learn exactly how hard you need to push. At normal speed, very little force is needed to achieve a serious change of direction.

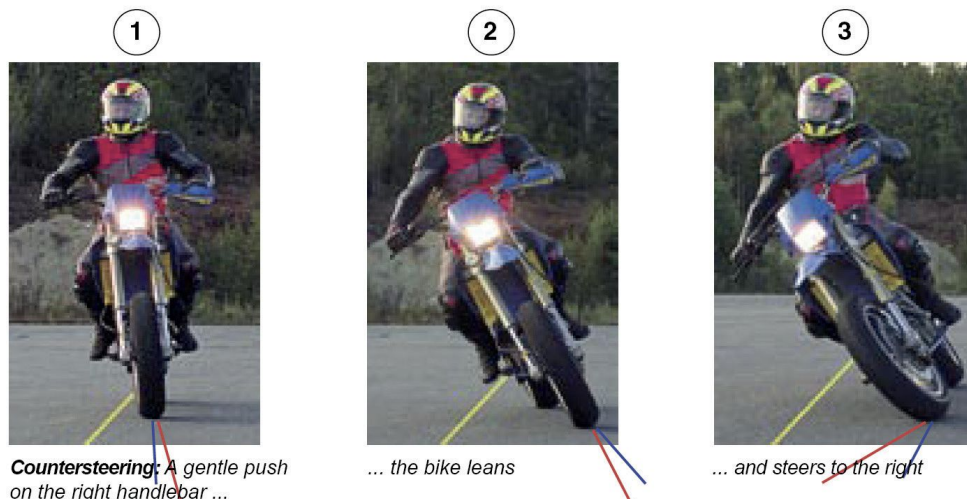
When entering a turn, the sideways forces will try to tip the bike outwards (read: hold it upright). To counter this, there must be an equal force that 'pulls' the bike inwards. That is one of the reasons you must lean the bike into the turn:

gravity will try to make the bike fall inwards. When in balance, these two forces make the bike go beautifully

through the bend. Countersteering enables you to quickly and precisely achieve the correct lean angle. The result is that you spend a very short rolling distance achieving the change of direction. You get a very precise 'turning point'. Imagine you are going into a right-hander. When you reach the turning point you give a short, precise, progressive push on the right handlebar. This done, the front wheel steers left for a short moment. The rest of the bike will, because of its mass and inertia, try to go on straight ahead, while the front wheel steers left. This cants the bike effectively to the right, a prerequisite for turning right. The angle of the front fork and the trail impels the front wheel first to straighten and then to turn into the bend when the bike leans. The bike now finds, all by itself, a perfect balance between the outward force and gravity, so that the lean becomes stable. A perfect, sensitive harmony between the outward and inward forces.



Counter steering: If you want to go right, give the right hand side of handlebar a gentle push



Amazing, isn't it? But remember this: The higher your speed, the stronger the self stabilising properties of the front end. You feel the bike as sluggish, hard to turn. It means that when speed goes up, your steering command must also be more powerful to make the bike turn when and where you want. In the chapter about steering, we will go into this in detail. Counter (or Positive) steering

We recommend you to start practising conscious countersteering and make it your only steering technique. This will give you an effective technique that you can use in all situations. When you have to make a quick change of direction or swerve, countersteering is the only effective way.

POSTSCRIPT

That's all for this month; a huge thanks to all our contributors, without them it would just be the ME show which would instantly become boring, so please consider sending me something to share with the membership, anything vaguely bike related which lights your fire would be very welcome.

Contact me:

whamnewsletter@gmail.com

Enjoy the ride and watch for the potholes!

Jim Rolt

Newsletter Editor