



Suffolk Riders



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Chairman's Update:



The last month has seen business as (new) usual with socially distanced training rides and socially distanced social rides. A few members have ventured further afield than our own great county, into Northumberland and Scotland, and myself and a couple of members spent 5 days on a Welsh tour which was surprisingly excellent.

Other than for work, I haven't spent any time in Wales since my very early twenties - wind surfing off the Gower peninsular.... So when Ben & I were planning a trip to Scotland, and Ben suggested it was too far for the amount of time he could spare, then Wales was suggested, I was reluctant. Mainly based on hearsay of the weather generally being wet and the people being unfriendly. Well, the terrain, roads, weather and accommodation were all excellent. The scenery and roads reminiscent of Scotland - if a little less hilly, but most enjoyable and eminently rideable in a short day - rather than a day and a half. What shocked me more than anything else was the fact that not only did it not rain, it was too hot in Wales (said nobody ever before!). The B&B host was a biker and he had space in his ample garage for all 3 of our bikes - as well as his Bonneville T120 and Tiger 955. Great few days away!

I'm also booked on the Highland Fling this year so hoping to get up to Scotland for a week - but it's in the lap of the gods as to whether it can happen or not with restrictions and rules changing daily. We live in hope.....

If you are attempting a biking break before the end of the year, I wish you the best of luck! Ride safe!

It's looking more and more like our AGM will be a virtual meeting this year and the committee are working to trial a 'town hall' style Teams meeting, so when this has been tried & tested adequately we will be in a position to let you know how this could work. *Jon.*

September Activities

Group Training Ride 13th September 2020 - *Steve Last*

Riders: Stephen Worrall

Stephen Cook

Stephen Last (Associate)

Karen Peters (Associate)

Route: Tesco Martlesham to Old Buckenham School

A sunny warm Sunday morning saw us gather at Tesco Martlesham for the ride in somewhat ideal conditions for an enjoyable outing. I was asked to lead the group for the first part to Earl Soham and after a tour of the car park, my first visit to this one, we left and headed north on the A12 for a short distance before turning off on the Grundisborough road. The route to Earl Soham had a good variety of country roads and lanes and I only had to U turn the bike twice!

We stopped in a lay-by in Earl Soham for a quick debrief and then Karen lead the group along the A1120 to Dennington then north on the B1116. We then passed through Stradbroke to Hoxne for our second team chat. Karen lead again to our final stop at Old Buckenham school passing through a busy Diss.

This was only my second group training ride and personally I did benefit a great deal from being with two other very experienced riders which is what GTR's are all about.

A voluntary extension to the ride was taken by all to [Jimmy's Cafe](#) for refreshments and social sitting outside in the warm autumn sunshine, a good day had by all. Can I say thank you to Stephen W from all the group for organising this GTR and I look forward to hopefully being included in future rides.



~~Dolomites Trip 7th - 16th September. Northumbria Trip 7th - 11th September.~~

It was to be a tick off the bucket list for this born-again-biker. Riding down to the Dolomites with a bunch of experienced bikers, travelling on roads with such evocative names as the [Bundesstraße 500](#), the [Stevio Pass](#) on the Strada Statale 38 and the [Route Napoléon](#). Phil the Planner put so much effort into finding hotels and routes and reroutes, but, in the end, to no avail. As Covid-19 spread around Europe, the Foreign Office kept adding countries to a list of 'must isolate on return,' each one then excluded from insurance policies. Finally, Phil decreed a European no-go: we have to stay in the UK. Wales would not let us in; Scotland, well there is already a trip planned for October, so he came up with Northumbria.

At 2300 the evening before departure, 6th September, I was still loading the last route into my Garmin zūmo XT. A reasonable night's sleep of 6.5 hours (according to Fitbit) to wake up to the realisation that [AllStyles Insurance](#) (I joined them after a talk they gave last year) had not sent any renewal documentation - I'm not insured!!! The good lady offered to deal with them at 0900 and contact me.

From Beacon Hill Phil, on his 1200GS, led all the way at a cracking pace, followed by Steve Russell on his Kawasaki 1400 ZZR, Martin Drury on his Kawasaki H2, David Wood on a Suzuki VStrom, and Trevor Fisk, who joined us for this leg of the trip on a BMW 1000XR.

With several breakfast runs under my belt, you think that I'd be used to the pressure of keeping up with experienced riders, but, being near the rear of the group puts quite a strain on one's mental agility to keep up. However, the bike behaved beautifully, and I only once made an overtake which had fail written all over it. Two hours until breakfast, shame the sausage was like cardboard, coffee was instant and no brown bread, but it went down well enough and fortified me for the rest of the day. Oh, I had a 'Giant Eccles' cake with a decent cup of coffee at a place someone told us about,



as the one we had marked on the map had been turned into a Covid test centre. We had a very good ride across the Yorkshire moors, down windy narrow roads and by smelly farmyards. We went to [Rievaulx Abbey](#), but you needed to have booked to get in. We stopped on the moor for a photo but the bike slid off the footrest and fell over. Not too much damage, but lesson learnt – I hope (I have done it before). NB I could hear Keith G's voice in my head "Leave it in gear!"

At 1500 the good lady called to say that I was now insured. AllStyles had mistaken my instruction to cancel the foreign travel requirements for a policy cancellation: almost unbelievable.

It was relaxing to sit in [The Village Inn](#) at Northallerton with a beer followed by a glass of wine with dinner. The latter was so large that neither David W or I could finish. To quote a line from Van Morrison's [Coney Island](#), "The craic was good," as Steve's regaled us with stories of life in his somewhat chaotic household, like attempting to lift his 15-year old son's training weights or, buying a

new bike and without telling his wife, only to undone by her friend who spotted the different number plate. Put five individuals together who share a common interest in motorcycles and out pops differences and similarities. The political divide was almost 50:50 (but never intruded) and 4 of the 5 had at one time worked for BT; 2 were bored stiff, left and went on to other careers, and 2 enjoyed their whole working life. C'est la vie.

The 8th September dawned, beautiful day, great breakfast then we're riding



west to Barnard's Castle where a lovely lady took photos of us in front of the welcome sign and I was informed that the town was Dominic Cummings home, not that I have any positive feelings for Mr Cummings: entirely the opposite. We then turned north to cross the highest metalled road in

England the A689 at Killhope Cross. Not sure where the cross actually was, we pulled into the lead mining museum, which I'm sure would be a worthwhile visit on another occasion, but was closed of course. Just a mile or so up the road there was a parking area on the boarder

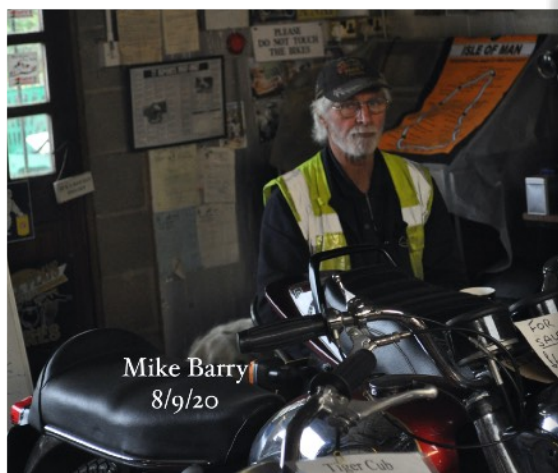


separating two 'dales' and I could see the cross on the right hand side of the road.

The next hour or so we were riding the planned route, then Phil saw a sign for a

motorcycle museum and finally we found Mike Barry and his [Tudor Metalcraft workshop come](#)





Mike Barry
8/9/20



Mike Barry's 250cc sidecar

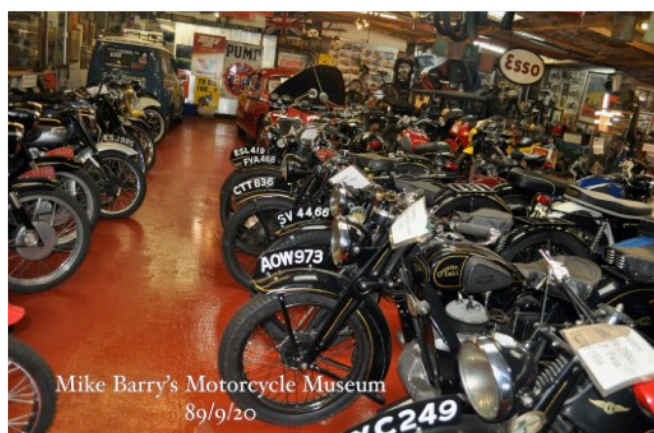


Mike Barry & Martin Rodgers (Suzuki) 1986

[museum](#). A few words can't describe Mike Barry, ex lorry driver, TT motorcycle champion (250cc) plus numerous other awards. Passionate about his hobby, he must have 70-80 plus bikes, beautifully restored, which all began when he bought a Coventry Eagle to do up to sell, but liked it so much he kept it & started the collection. He took us round some of his machines, to tell stories. One story I liked was after crashing on the Isle of Man, and being hooked up to tubes to keep him alive he told his wife he was giving up racing. The following

year he came across a particular bike which he thought could be a racer, did it up and entered it into the 250cc class on the TT. Telling his wife that he was going to help a friend as a mechanic and pit support went off to the race and won the 250cc championship. Later that year he took the bike up to Scotland and won a few more races.

When it came to the presentation dinner he talked his wife into going along with some friends and their spouses. As she was driving along she turned to him and asked if he knew any of those being presented and had to tell her he was a champion, she went through the roof. He then went on to win the title 3 years running. NB I tried to find a record of Mike's wins at the TT, but could find nothing on-line. If you have more information, please let me know.



Mike Barry's Motorcycle Museum
8/9/20



We'd spent a long time at Mike Barry's so Phil decided to cut off part of the route and, instead, go to Gretna Green for some lunch. It's been so long since my wife and I were there, maybe 50 years, but so different. Now it is a mini Las Vegas marriage venue, tawdry comes to mind. There was one wedding going on but it was basically empty.

A guide gave us a potted history & I learned that there has not been a wedding 'over the anvil' since 1941. A niece eloped here to marry, but must have done so in the local registry office and maybe came to the smithy for a blessing. NB the marriage didn't last!



The last ride of the day was the Kielder Forest Trail, 12 miles of shale road. Steve's advice, stay in the car ruts and only use your back brake. Well, I managed the ruts easily enough, except just once when avoiding a pot hole, and there a so many, I just caught the centre line of shale and had a tiny wobble: and I only used the back brake once. The Kielder Forest run was a toll

road, £3, but coins only. We tried the café and the car park to see if we could bet coins, to feed the machine, but no joy. Finally Dave W went in the bicycle hire shop to ask for change and was told that motorcycles were free. When we arrived there were half a dozen biker feeding money into the pay-point! I'm sure the scenery was delightful, and I did manage to glance across to my right



to see the fells in the continuous drizzle, but my concentration was on the surface.

Last day of touring began at Jedburgh. We rolled into the carpark in front of the ruined abbey, café & toilets shut so we went behind the bushes, just as loads of people and dog walkers came strolling by. Fueled up and on to Kelso, but there were so many roads up (not picked up by Garmin Drive) for repair that Phil had quite a job stopping and searching th

map to find a way to get back on track. As one local told us “Welcome to Scotland.” Lovely roads, but the wind was very strong, particularly coming out of a line of trees or a hedge into a gap and get caught by a gust. One of the worst for all of us was when a lorry carrying logs went by in the opposite direction and the bow-wave moved the bike a couple of feet out on the entry then back in on the other side.

Today’s highlight was Vindolanda. Phil had booked us in for 2:00pm, arriving with a few minutes to

spare, £8 to get in with our concession.

It has changed so much since my wife and I were there somewhere in the early 70s. I remember the wooden fort and was told by the girl on reception that it had morphed at least 3 times since then. Walking toward the commandant’s quarters we met a lovely lady who told us something of the history and said we should go and talk to a girl who was excavating. She



turned out to be Italian, with a Geordie boyfriend who had worked there for seven years. Her name was Martha and had an excellent grasp of colloquial English with an Italian accent. She said she had to learn to speak like that to win arguments with her boyfriend. Further down toward the valley and museum we met a lad who had spent 3 years working on the latrines and had worked out where all the



gullies went and reconstructed them so that they worked as they did in the 4th century. Walking down the to the valley bottom we visited the museum, just so well done, and interesting, I could have spent a couple of hours there; although one can’t take in all the detail. As we left we passed the reconstructed wooden fort and a sign nearby showed that there were seven distinct levels, going down between 3 and 7 metres over the 400 years of occupancy. I liked the story about the end of the site, when

the soldiers were stopped being paid in 405 AD. Many were from Belgium or Gaul and had married or had reasons not to go home so stayed, set up home for a while and within a couple of generations had migrated away from the fort, and used it for building material.

10th Sept. and the final day of touring. We left the fake Premier 'Lodge' (don't go there) in Morpeth, breakfast in Morrisons then north through lots of twisting roads, including a cart track, going the

clappers of course! Arriving at Lindisfarne with loads of tourists. Then around the ruins of the abbey, at least on the outside, not paying the £8 for a ticket, we settled in an open café where it took about 30 mins to get a toasted sandwich.

Returning along the coast road we stopped at Bamburg Castle for photos and a rest stop. Then on back to the Village Inn at Hexham.



We retraced our route home on the 11th Sept. By now settling into pattern with Phil leading, David 2nd, me 3rd and Martin and Steve bringing up the rear, as they 'liked the opportunity to catch up!' With the heavy traffic

on the A17 we seemed to break up around the River Nene crossing; some meeting again, but I ended going the rest of the way home on my own.

I had a great time, both riding and socialising. I learnt a lot and was the beneficiary of sound advice from my colleagues, which I hope will be ingrained in my ancient brain. Looking back, I made quite a few mistakes and wonder how I might have fared if we had actually travelled to the Dolomites. Food for thought and probably a lot more practice before I venture onto the real thing. Special thanks to Phil for the organising and leading, he did a superb job.



October Activities

Group Training Ride 18th October: Beacon Hill Services to Cafe 33, Stradishall
"Times to be allocated."

We are pleased to confirm the date for our next 2020 COVID-19 GTR: 18th October 2020, Beacon Hill Services to [Cafe 33](#). Please use the following link to register your interest with the [Training Team](#).

Places will be limited; as with the social rides it will be 'first-come, first-served.' Separate groups of 3 riders + 1 tutor will meet and run at least 30 mins apart, to ensure adequate separation, and to remain below the maximum of six in any single gathering. The usual COVID safety and social distancing rules will apply.

We can run at least two groups, any additional groups will depend upon the availability of extra tutors.

Ten days before the GTR we will close registration, and allocate riders to the number of tutors we have available, notifying anyone we cannot accommodate. Riders will be notified of their start time and tutor, together with an updated GPX route and instructions. The routes posted on the Group website will not be used for these GTRs.

So we look forward to riding with you on the 18th!

'The Two Steves'

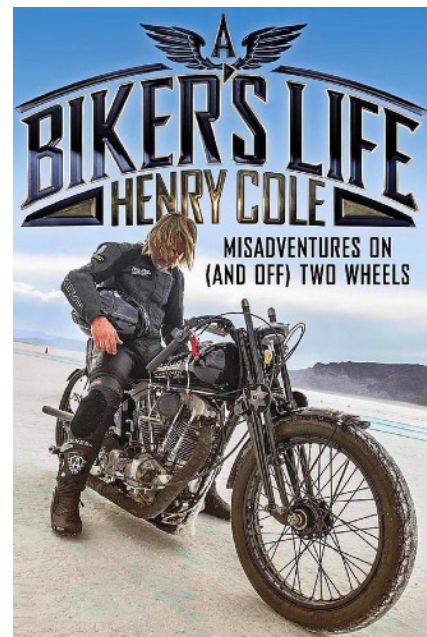
Member's Forum

Motorcycle Touring in the Time of Covid (with apologies to Gabriel García Márquez) – Phil Sayer

"I can't think of anywhere in the world I'd rather be than on a motorbike." (A Biker's Life - Henry Cole)

If you like reading books about motorcycling, try [Henry Cole's autobiography](#). A good read. He came to the Copdock Show a few years ago and one of the best (and worst) celebrities we've ever had. He was a nightmare to manage. We wanted him to present the prizes, but all he wanted to do was to chat to anyone and everyone on the showground, have a selfie taken with everyone, chat about their bike and so on. The visitors loved him and we've been trying to get him back ever since, but he's become nearly as hard to book as the Hairy Bikers, and they are booked up two years ahead and cost a fortune.

Anyway, one of the things Henry writes about in his book is that in a car, a journey is trying to get to your destination. On a bike, it's all about the journey. You see so much more on a bike, you experience the weather, the roads, the scenery – no, you are part of it, not just seeing it through a glass window from inside a steel box on wheels. That rung a bell with me; I realised that most of the time I don't really care where we go on our rides and tours – it's just great to be out on the bike and riding with a few mates. You've probably tried and failed to explain to a non-biker what it is that you love about riding a bike – you have to experience it for yourself. You just can't explain it in words.



One of my favourite quotes from "[Love in the Time of Cholera](#)" is "Age has no reality except in the physical world. The essence of a human being is resistant to the passage of time. Our inner lives are eternal, which is to say that our spirits remain as youthful and vigorous as when we were in full bloom." I think what Gabriel means is that when you are riding a bike, you can still believe you are about 21 years old – although perhaps not quite as crazy as you were then (on second thoughts, watching the way some of you ride that may be wishful thinking). With the sun visor down nobody knows that you are an old git – they think you are a young tearaway. And then we get off our bikes and we return to reality – and talk about our aching backs, ankles, knees, etc.

And so to the point of the article. Here in Suffolk Covid has seemed a bit like a phony war, but the news has been uniformly depressing, even if we have been relatively untouched by the virus. With a million deaths worldwide and tens of thousands losing their jobs it seems churlish to complain that we haven't been able to enjoy our motorcycle riding as much as usual. Lockdown in the spring had its benefits – the roads were empty and I had some great days out on the bike as a volunteer delivering kits for ladies to sew into sets of scrubs for the NHS. But now the roads are as busy as ever. As you may know, I was planning to lead a group from Suffolk Riders to tour the Alps and the Dolomites. Then Boris put France

and Switzerland on the naughty step and we had to cancel. There was talk about whether by riding through France to Germany without stopping other than to fill up meant we could avoid quarantine on our return, but 'essential travel only' determined that our travel insurance would be invalid, so even if we could go, it was not a sensible thing to do. So we went to Northumberland instead. We had a great time, but the Kielder Forest Drive in drizzle wasn't quite the same as the Stelvio Pass in the sunshine. And everywhere we went, places were closed – including restaurants and many visitor attractions. We tried to visit Killhope lead mining museum. It was closed so we had a wander round anyway. Until a man came out of the closed-up building to



tell us we couldn't look around, health and safety you know, and would we please leave now. Others required a pre-booked time slot. We went to Vindolanda on Hadrian's Wall – a brilliant place to visit. But to get there for 2 o'clock we had to race across half of Northumberland watching the clock, which took some of the fun out of the ride. Last year in the Picos some of the best fun we had was when the main road was closed, and we had to take a detour over the mountain on a goat track. That would have been no fun at all with a deadline to meet for a timed entry to

the next attraction. Some of our regular roadside cafés were doing take-away only, which is OK if it is warm and dry, but not if you are wet already. And somehow it felt a bit wrong to be out on the bikes enjoying ourselves, when so many people and businesses were suffering.

But the joy of riding a bike is that once you get into the zone, you have to concentrate on riding and forget about Covid and everything else except the moment. Overtaking groups of lorries on the A17 between Boston and Kings Lynn springs to mind as an example. You can't have fun like that in a car! But to quote Henry again: "You also learn a lot about yourself when you are wet, cold, concentrating and when your life depends on every decision you make, which is absolutely true when you're riding in rain."

Motorcycle touring in the Time of Covid. It's not the same, but we are very fortunate that we are able to do it at all. Vizion down, concentrate on the ride, enjoy the scenery, and make the most of it while you can. And fingers crossed that we can still ride to Scotland next week before the second wave of Covid engulfs us all!

You are charged with a heinous crime. – Colin South

How to you plead - guilty sir.

It was our usual Thursday ride out, this time to the Jungle Café at Beccles. My friend and I have been riding out most weeks since he got me interested in biking after a lapse of 40 years. He's been riding all his long life (he's older than me - and a nicer gent you couldn't wish to meet) and is totally uninterested in progressive riding or taking additional courses. I usually lead, since I have a satnav, and he is content to follow. If I show a bit of speed he will be seen trailing further behind, keeping his own pace. He is a real steady Eddie, cautious and competent: only once in the last 5 or 6 years have I seen him make a mistake which could have proven serious. We've been away a few times for long weekends and have a history of loosing each other; meeting up again after frantic phone calls on the way out or on the return he has just found his way home.



On this Thursday I had just crossed the A144 near Bungay, turning left from Grub Lane and right into Hogg Lane just a hundred yards down the main road. I had not waited for my friend to close behind, but I could see him in the rearview mirror. The A144 was busy, so I squeezed into a space and within a few seconds I was happily accelerating along Hogg Lane. Half a mile down Hogg Lane there is a left and right-hander; I couldn't see my friend so stopped to wait for him just past the right hand bend. No sign. I waited for several minutes and then made the assumption that he had missed the right-hand turn on the A144 and had sailed on toward Bungay, I called his mobile, no reply, so left a message to meet at the Jungle Café or to give me a call. He didn't show up at the Jungle Café so I called again before leaving for home to say I'd catch up later.



Somewhere near home the mobile phone rang in my helmet. It was a paramedic calling from an ambulance to say they were taking my friend to the James Paget Hospital at Gorleston, and would I contact his wife to let her know his situation. She put him on the phone and he told me he come off on a left-hander and gone through a hedge into a ditch. He didn't feel too bad, but had a pain in his neck which they needed to check. He was very worried how his wife would take the news so asked me to contact his daughter-in-law to pass on the news. Back home, it took me several phone calls to track down and get a message to his daughter-in-law, who was with his wife.

The next day I went to his house and got the full story. In a nutshell, he had taken the left-hander too near the centre of the road, hit some gravel, lost the front wheel, and the next thing he knew he was lying in a ditch with his head below his feet, looking up at his bike tangled up in a hedge above him. He lay there for some time wondering “Where’s Colin?” A few cars passed by before a Good Samaritan, in the shape of a fireman, stopped, called the emergency services, sent his wife and family on and stayed with my friend holding his head still until they arrived. Without his hearing aids (they whistle in the helmet) he did not hear my phone call, and could not call me for the same reason. It took an hour before the Fire Brigade could extract him from the ditch and get him into the ambulance. He was released to his son-in-law at about 11:00 pm, suffering only a grazed thumb.

As I write this account the feeling of guilt haunts me still. How could I make such a stupid assumption that he had missed the turning? Why did I reject the thought of going back to make sure nothing was amiss? I’d have lost nothing in making the effort. I’m sure many of you reading this would have automatically retraced your route to look for a friend. I didn’t, and have to live with the guilt, but I will never, ever, make the same mistake again.

There is a postscript. The bike was recovered to Ling’s who have assessed the damage and appears to be a borderline write-off. If that’s the case my friend will buy the bike back, repair it, and take to the road as soon as possible. As he told me, it’s the only real excitement he can look forward to, you just can’t beat it. Oh, and he says I’m not guilty, we’re still friends.

Bargain Basement

Last chance before these items go on sale at Gumtree. The items belonged to a dear friend Paul Siddaway who sadly passed away in March. There is no price but a reasonable donation is expected which will go to Cancer Research.

If you are interested please reply to me by email or text. Can be seen and collected from me.

[Keith Gilbert](#) 07546 301458



1. HEIN GERICK JACKET - LEATHER AND FABRIC - SIZE 50 (fits me)





2. TRIUMPH SUMMER JACKET
- GREY WITH BODY ARMOUR
BUT NO LINER - 46/56



3. HOOD MOTORCYCLE JEANS
KEVLAR WITH KNEE AND HIP
PROTECTORS - BLUE - 36 (fits me)



5. HALVARSSONS OUTLAST TROUSERS WITH LINING AND VENTS (fits me, I'm a 34" waist)



7. DAYTONA ROADSTAR GTX BOOTS SIZE 43. SCUFFED BUT GOOD SOLES AND WATERPROOF.



Technical Corner

REMAPPING - Keith Gilbert

After two 1150 BMW GS's, the second one was written off in an RTA: another story.

This was replaced by a 1200GS in May 2007. Due to family illness it was September and a trip to Corsica before I really got to cover a few miles and get a feel for it and while in Corsica we headed for the National Parks with their loose surface and tight hairpins. After the flexibility of the 1150GS I struggled with the poor throttle response and was forever slipping the clutch on the tighter turns.

On our return to the UK a service was due at [Cooper Motorrad](#). Having known Steve Franklyn, the service manager for some time I asked if he could do anything to improve the throttle response at low speed. The answer was NO but I was welcome to try the three second-hand models in stock and if I thought one was better than mine he would swap the ECU over. Rode two of the second-hand bikes which were no different to my own.

Next step was to visit Phil Seaton at [Seaton Tuning, Colchester](#). On leaving the GS with him he would find time to run it up on the Dyno. Within a couple of days he called to say it showed a very weak mixture up to 30% throttle. In fact, leaner than they would set on a race bike. He surmised it was due to the Euro emission laws but would like to ride the bike back to Stowmarket to see how it felt compared to the Dyno air/fuel map, bearing in mind the original 1200's had no switchable power modes.

What next? Put up with it. NO. A call from Paul at [Dynospeed](#) to tell me that there was now a power commander available for GS 1200s and he had ordered one for me. If he couldn't improve the throttle response he would send it back.

It was early April 2008 when Maureen and I went down to Hainaught for Paul to fit and map the power commander. After 4 or 5 runs he appeared from his Dyno room and said 'go and try that.' Well, I didn't even leave the industrial estate. WOW!! sorted.

The power commander stayed with me on the next three GS's, the current one purchased January 2019. Although I fitted it, I was unable to get it on a Dyno to check the map.



On the 2nd September I finally got it into TTT Motorcycle Village at Sudbury, where Andy Pallett is running the Dyno. His first reaction was he would want to drill a hole in the exhaust before the gases got to the cat to get a more accurate reading. Okay, that's fine with me, carry on. The hole was drilled and an insert fitted just below the left hand side cylinder head.



After numerous Dyno runs and a small screw fitted in the insert it was ready for testing. WOW, WOW I would not have believed it could have been improved so noticeably. I've never looked for a power increase, just

smooth throttle response and that's what I've got. The best £117 I've spent probably due to that small hole in my exhaust where Andy put the probe.

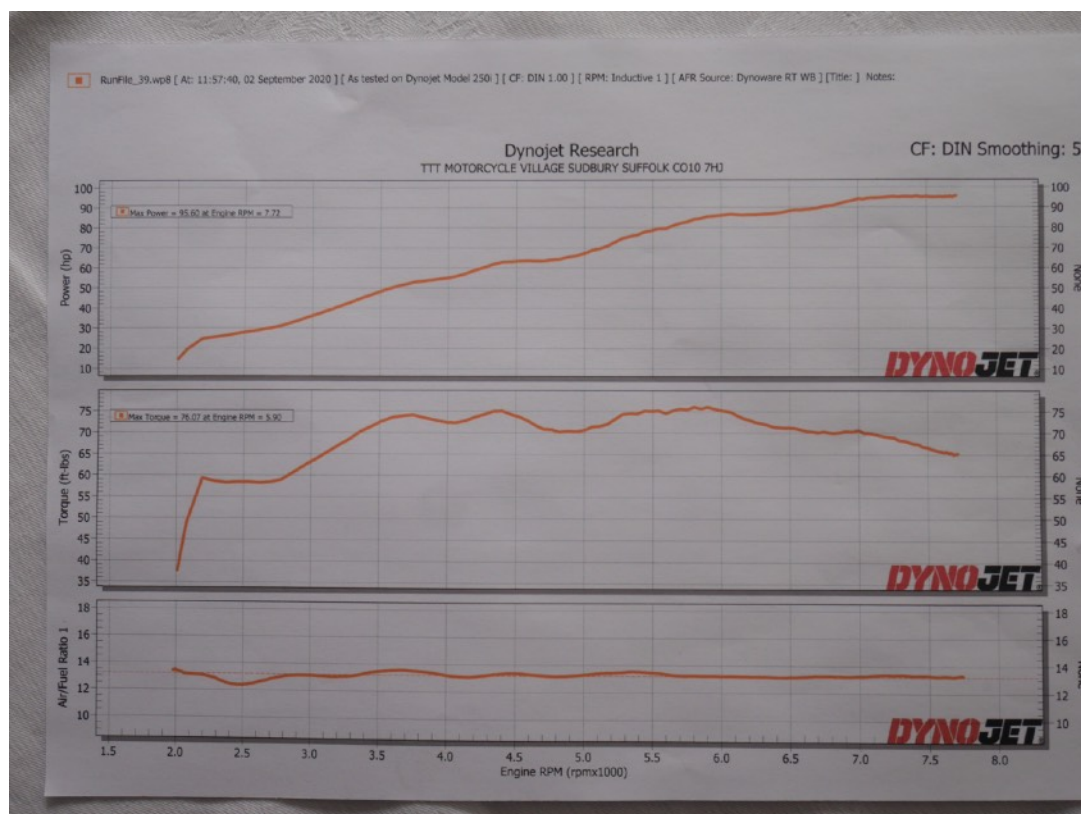
Max BHP 95.6 @ 7.720 rpm

Max torque 76.07 @ 5.900 rpm

Air fuel ratio Flat lined from 2,000 rpm to 7.60 rpm

Thanks Andy.

PS: Maureen and I rode up to South Humberside in early September and she claims it was a smoother ride than ever.



Don't make the same mistake. – Karen Peters

I write this somewhat red faced and embarrassed, but if it helps just one person it will have been worth it.....

Training rides are always enjoyable for me and I usually learn something new. On my last training ride I was speaking to one of the Steve's who mentioned that he checked his tyre pressures every day. Now I thought that was a bit excessive and then I thought harder: well when was the last time I checked my tyre pressures on both bikes, bearing in mind I had just had a front tyre puncture on the Zed? Answer... absolutely no idea, I couldn't remember.

After checking my handbook for the 650cc the pressures should be 32psi front and 36psi rear. I was picking up a new inner tube for the Zed and thought I would treat myself to a tyre pressure gauge and found I was running at 20psi front – oops that's not very good!!

This mistake will probably cost me a new front tyre but obviously it could've been a lot worse!

When I was undertaking retraining to get back on a bike, my instructor would have me walk around my bike doing POWDERS(SY) out loud before we went out (the other S was steering and Y was yourself). I can't remember his exact words, but it was something along the lines "You only have two tyres and either one can kill you." Ed.

Please Help? – Bike Theory – Bakson

Normally I write drivel like going from Cairo to the Cape in 100 words, or not nodding, but the times they are a'changin' so here's something more serious to get your teeth into.

Believe it or not, I'm a humble sort of bloke and acknowledge that I don't know everything, and, especially, I don't know what it is that I don't know so, in pursuit thereof I booked in on an [Advanced Machine Skills from Essex Firebikes](#) which ran in August. As a result I also discovered things I know I don't know about, and it is these with which I need your help. Please.

Before I begin, let me say that the Essex Firebikes course is excellent beyond words, and free as well. If you ever hear of one happening, fight tooth and nail to be enrolled. Book a place first and see how to fiddle your diary second. Alternatively, we run our own very similar course with some of the same instructors. Unfortunately, we had to cancel it this year but I'm sure we'll be able to run one in 2021 so keep an eye out for the announcement.

What did they teach me through demonstrations followed by exercises? Here is a short list:

- When to avoid using the front brake (at slow speeds)
- When to avoid using the back brake (for emergency stops)
- Just how quickly does a bike stop? Very, very. Think feet, not tens of yards
- Should you cover your front brake? (Never)
- How does rear braking load the front tyre? (It's the opposite of a wheelie!)

My big takeaways from the course were slow speed turns and emergency braking and I am sure other people got other things.

I could give you a blow-by-blow account of the course but mere words could never convey the whole brilliant learning process. Instead I want to worry you with some of the questions that their demonstrations raised with respect to how and why a motorcycle goes round a corner. I thought they were giving me the answers to:

- Once a bike is moving in a straight line, why does it keep upright?
- Once it is going round a corner, why does it keep going with no input from the rider?
- How to transition from straight line motion to cornering?



To simplify the problem I want, in this first instance, to consider only a free rolling motorcycle tyre with a rounded profile. Perhaps I'll get to worrying about two-wheeled vehicles later.

For the first question, our instructor (Ben) rolled a tyre along the ground and it went in a straight line and he said "See? It goes in a straight line. It's gyroscopic effects that keeps it upright."

For the second, he put the tyre at an angle and rolled it and sure enough it went in an approximation of a circle. Ben said that it was the profile of the tyre that was the cause.

For the third he did a brilliant demonstration that involved a bicycle wheel as pictured (home made, I just drilled a hole on the ends of a couple of dowels and shoved them over the axle stubs).

Ben held a dowel in one hand, used the other hand to get the wheel spinning and then held the second dowel with it, so that it was turning between his two arms with the top of the tyre going away from him. What happened next I thought he was faking: he

jabbed horizontally with one hand and the whole wheel canted over violently. There were ten of us in the group; we all had a try and I was last. The expression on the face of each person in turn was one of amazed surprise, and even though I had seen it ten times it still surprised me: the twisting force was very strong. Yes, jab with the right hand and the wheel leant over so as to be perfectly set up for a right hand corner. Jab with the left hand and it set up for a left hand corner.

Ah-ha, I thought, counter steering explained in one easy lesson.

So, there you have it. Why bikes go in straight lines, why they go round corners, and how to transition from one to the other. I thought that Ben's three demos were fascinating, as well as being simple, clear, to the point and utterly believable at the point of delivery.

My problem was the "fascination" aspect. My brain wouldn't stop asking "Why". By the time I had finished exploring I was none the wiser, and now I am trying to accept that simple explanations are good enough because they make sense despite the fact that they are patently wrong. But that isn't good enough. I have this internal dialogue that goes Brain: why? Me: shuttup. Brain: why? Me: just accept it. Brain: why? Me: ahh shuttup will you? Brain: ... you get the drift?

Why are these powerful demonstrations wrong, at least in part?

Ben is probably right that gyroscopic effects keep a rolling tyre upright, but there is more to it than that. Just to begin with, we have to consider the friction between the tyre and the ground, and the easy way to justify that line of argument it is that if the tyre were perfectly smooth and the ground perfectly slippery then whereas it might slide there is very little chance that the tyre would roll, never mind stay upright. We should also consider gravity and linear momentum ... even this simple problem might not turn out to be easy to explain.

With regard to the profile causing the tyre to follow a curve, he is almost certainly wrong (sorry Ben). As we all know, a bike going round a corner has to lean in so as to counter the centrifugal forces that are trying to throw it out. It's a delicate balance: not enough lean and you fall over one way, and too much lean and you fall over the other. But back to the tyre: as well as the angle of lean, we have to consider the gyroscopic effects, friction, and probably a lot more as well. The friction is interesting because the tyre is actually pointing in a different direction to its travel (think 'tangent to a circle' and you'll get the idea). The tyre's profile certainly does have an effect because it means that the contact point (or patch if you are going to be pedantic) is no longer in the same plane as the tyre ... but don't ask me what the effect is. And don't forget its weight acting through the centre of gravity of the tyre. Which brings me to a challenge for you engineers/scientists out there. Please can you tell me why the tyre follows a curve? Note, I am just considering a single tyre, not a whole bike. What are the parameters that affect the radius of the curve and the angle of lean, and how do they work together? And the simple and blindingly obvious answer "speed" is insufficient: it is merely a part of the equation.

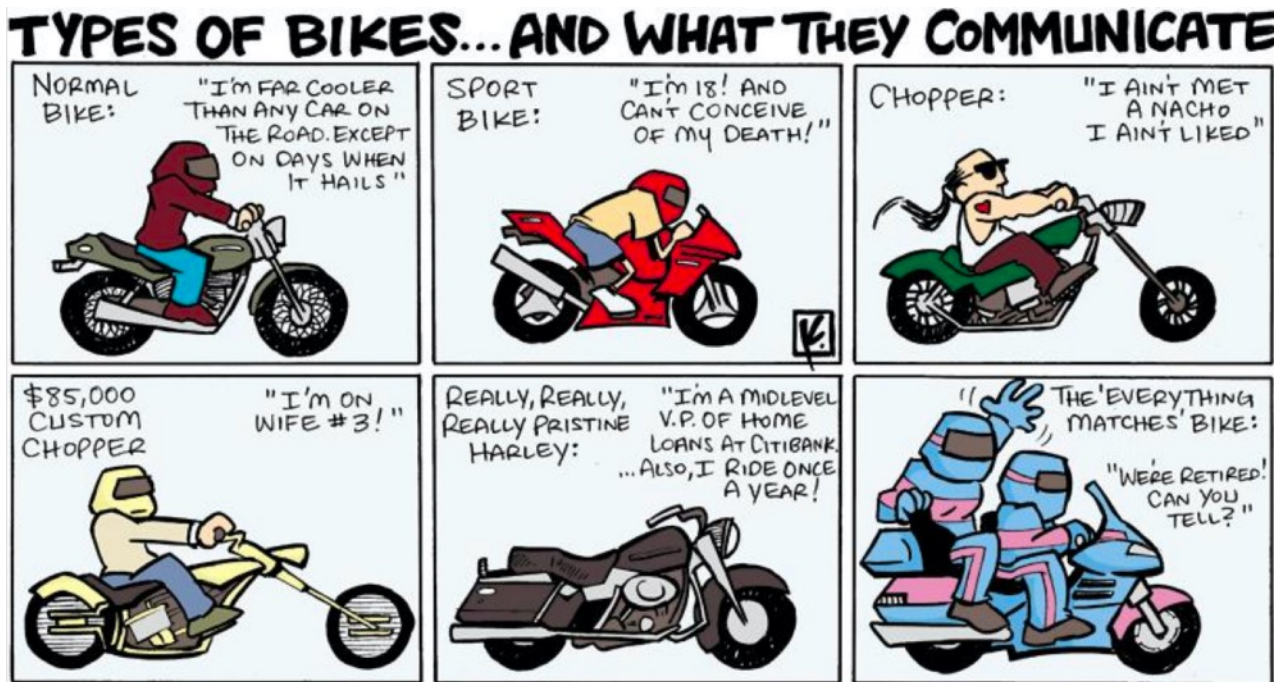
Now to address Ben's wheel. On YouTube you can find many examples of people doing a similar demonstration, but they sit on a swivel chair or stand on a swivel board showing that if they twist the wheel it makes them turn. None of them show what happens if your feet are planted on terra firma, and you push the axle horizontally: that is why I built the wheel pictured above. I tried the experiment with three different people (a child, a woman and a strong man) and all had the same instruction, which was to jab one hand forward horizontally and see what happens. To my disappointment all reported the same thing: nothing. So I tried again and this time told them to move one hand vertically, and the demo worked perfectly and when I revisited the YouTube videos I could see what they were showing: up and down movement, not in and out movement. Ben's demo worked because we all had an element of vertical movement in our jabs. I cannot find a simple answer to the question "why does the wheel cant over so hard when you put a gentle twist on it?" Please can you help?

Maybe the secret to counter steering is hidden in the answer. Maybe not. I have another theory and will go into it some other time.

Answers to both questions on a postcard please. Or email them to me at wheels@handmadewebs.co.uk

The Last Laugh Word

My thanks to this month's contributors, the regulars and the new.



A ten-year-old boy was walking down the street when a big man on a black motorcycle pulls up behind him and asks, "Hey kid, wanna go for a ride?" "No!", said the boy, and he kept on walking.

The motorcyclist pulls up to him again and says, "Hey kid, I'll give you 10 bucks if you hop on the back." "NO!" said the boy and proceeded down the street a little quicker.

The motorcyclist pulls up to the boy again and says, "OK kid, I'll give you 20 bucks and a BIG bag of candy if you hop on the back for a ride." At this point the boy turns around to him and screams angrily, "Look Dad, YOU bought the Honda, you ride it!"

It's very lonely sitting here so any response would be most welcome. [Colin](#)