

# BEDS VMCC NEWS

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SECTION BUILDING A    PETRONAS    L-TEST    ASTON HILL    RESTRICTED  
NEWS    POWER PAK    ROAD BIKE    MEMORIES    PART THREE    ACCESS

## EDITORIAL

Not a good vintage motorcycling start to 2025 – both Vintage Stony and the Barrington meet cancelled because of the wind, and the January Winter Wanderings Run also cancelled because of the expected low temperature, salted roads and risk of ice. Oh well, it is the depth of winter, so these things are to be expected. When the weather is like this, I regret having so many bikes because they don't leave enough room in the garage or shed to work on them comfortably. I know the solution is obvious – sell some – but each bike was purchased because I wanted it and, at the moment, none are currently out of favour. And there is still one bike on my wanted list – if one of those comes up, I'll have a major problem.

One bike that did fall out of favour was my 1919 Triumph Model H. The Model H is regarded by some as the best Early Vintage bike there is. I bought mine to replace my highly reliable 1913 Triumph Free Engine model when, after nine Pioneer Runs, I decided I fancied the luxury of gears and a hand, rather than foot, clutch. Big mistake. After 11 or 12 years of fixing and fettling I threw in the towel and off it went back to Cornwall to the descendants of a family that owned in the 1920s. That gave me the chance to buy the delightful little Triumph LW "Junior" I'd always fancied. That will be the subject of an article sometime in the future.



Many thanks to the contributors to this issue: Dave, Neil, Richard, Sam (Andrew) and Will. We really need lots more contributions, please - submit to me on: [bryan.marsh@btinternet.com](mailto:bryan.marsh@btinternet.com) and please, if possible, use Word with any photographs separate, not embedded in the text, to make it easier for me. Don't worry about grammar or spelling, they're easily sorted.

Bryan

## Beds Section News

### Upcoming Events

**CLUB NIGHT – JACQUI FURNEAUX/GORDON MAY, MOTORCYCLE ADVENTURERS, STMA, THURS 9 JAN, 7.30 FOR 8PM**



A warm welcome back to two speakers who have visited us, separately, before but this time as a joint effort. Expect Royal Enfields to feature strongly. I believe the intention is that it more of a question-and-answer session than a formal presentation so have a think about all the things you'd like to know before you pack your own bags and head off around the world.

## MIDWEEK LUNCH – NUYARD GARDEN CENTRE, THURS 16 JAN, 12 NOON

Rapidly becoming a favourite venue for lunches and breakfasts, you'll find on the left hand side heading from Flitwick to Westoning, next to the cricket ground or, unsurprisingly, on the right hand side heading from Westoning to Flitwick. Direction of approach optional.

## BREAKFAST MEET – RUNWAY CAFÉ, SHUTTLEWORTH, SUN 26 JAN, 10AM

We're heading back to the ever-popular Runway Café at Shuttleworth for our first breakfast meet of 2025. Why not join the SVAS (Shuttleworth Veteran Aeroplane Society) and get 15% discount in the café, 50% reduction for airshow entry and free entry to the collection throughout the year?

## WINTER WANDERING – STMA START, THURS 06 FEB, 10.15 FOR 10.30AM DEPARTURE



I couldn't resist "borrowing" this picture from a Facebook post – artist unknown

Should the weather permit, we will head out from Shefford in search of somewhere warm and dry to grab a coffee and a bite to eat. No route sheet or drop-off system, just try and keep the group together – it usually works. The actual route and venue will be decided nearer the time based on the expected weather and road conditions.

## December event reports

### WINTER WANDERING



Start your bikes, gentlemen, it's time to head out...



A welcome warming brew at Emma's Café in Woburn



The excitement clearly showing on their faces.



The bikes waiting patiently at Emma's for the second leg.

Conscious of the murmurings of mild discontent about the muddiness of the November expedition, the December route was carefully chosen to follow entirely sensible roads. Unusually for one of our runs, we didn't encounter a single closed road or diversion as we headed to the London Gliding Club by Dunstable Downs. The route was roughly Clifton – Southill – Old Warden – Haynes Church End – Maulden – Westoning – Tingrith to Woburn for coffee. Then Hockliffe – Stanbridge – Billington – Dagnall and back beneath the White Lion to the Gliding Club for an excellent, tremendously good value lunch. The whole route being remarkably light in other traffic.



What on earth is this?

## CLUB NIGHT – CHRISTMAS AUCTION



Anything worth having?



Brent leading the community singing

Always a fun night, the annual charity auction raised just over £300 which will be split evenly between the East Anglian Air Ambulance and a children's hospice supported by our February speaker, John Young. A real team effort setting out the room, labelling every item, foisting unwanted goods on unsuspecting buyers, keeping a record of the successful bids, collecting the monies, heating the pizzas, laying out the grub, making the tea and coffee and probably a few other jobs that don't spring to mind at the moment. Thanks to everyone involved and to everyone who gave a few pounds. Thanks also to Neil and Sam for the photographs.

**CHRISTMAS LUNCH – TOBY CARVERY**

We're not sure whether Richard deliberately booked one table for ten people and another for six, or whether that was the unintentional outcome of his battle with the Toby Carvery's booking system. As it turned out there were eleven of us, so we were able to make use of both which, luckily, were next to one another. A disappointing absence of paper hats and crackers but plenty of turkey and Brussels sprouts for those requiring a little jet propulsion on the ride home.

My own ride home had a temporary halt in Great Barford when the Bonneville blew a fuse ('the' fuse actually, as it only has the one). I only had a 10A spare and not knowing the required rating (it was a 30A that blew) I rode without the headlight and avoiding using the indicators to reduce the current passing through it - someone will probably tell me it makes no difference, but it seemed logical to me at the time. Just past Cardington once again stuttered and cut out, but this time the fuse was still intact. I still haven't diagnosed the fault, but the Pazon electronic ignition system is chief suspect.



**BREAKFAST MEET – NUYARD**

It seemed not everyone got the message about the change of venue because at about 10am I got a call, presumably from outside the locked gates at Shuttleworth asking where was I. "Somerset" was probably not the answer they expected, but I was able to redirect them to the Nuyard Garden Centre. I have respected their anonymity to save Nige's blushes.

*Testing the Petronas road bike*

**RICHARD CHAMBERS**



Seeing the picture of the Petronas road bike in the previous newsletter, I was reminded of before I retired when working at Millbrook Proving Ground in the engine test lab we supplied a test bed and a technician to develop the road bike. Apparently, the racing bike for World Superbike racing has to be based on a road bike that has to have sold quite a number, maybe 150 or even 500, I am not sure but they hadn't sold any at that time, hence the rush to get it sorted.

I had the job of installing it on the dyno, it was decided to mount it using

the bike frame complete with airbox as the bike had the exhaust coming out the rear of the cylinder head, with the inlet to the front.

The frame supplied was an old racing one that James Haydon had crashed in Germany and was bent somewhat. To get the engine in involved using a ratchet strap and a crowbar. I remember seeing the high-speed crash on TV, and how the rider wasn't also "bent" was a miracle.

There were many issues with the engine at first. After a while it was removed and came back a few months later with a different engineer called Ian Cramp who builds the Crampton road bike. He was also a handy racer, especially on a very quick KTT Velocette that he won a few championships with in the Historic Racing Club.

This time, the engine was much better and Ian showed us a trace of it comfortably at 170+ mph going round the Nardo test track in Italy.

The Foggy Petronas racing bike was fraught with many problems and always just not quite as good as the competition, Ian Cramp said it wasn't much better than a Honda CBR 600R and was like sitting on the Chernobyl reactor as it was so hot with the rear facing exhaust under the seat!

Not sure how many made it onto the road, but they were a bit different.

[Footnote: According to Wikipedia, 150 bikes were built in 2003 of which 100 were road bikes but apparently in 2010, Motor Cycle News discovered 60 unused bikes in a warehouse in Basildon, intended to have been shipped to Malaysia but which clearly never made it.]

*The Page 4 girl*



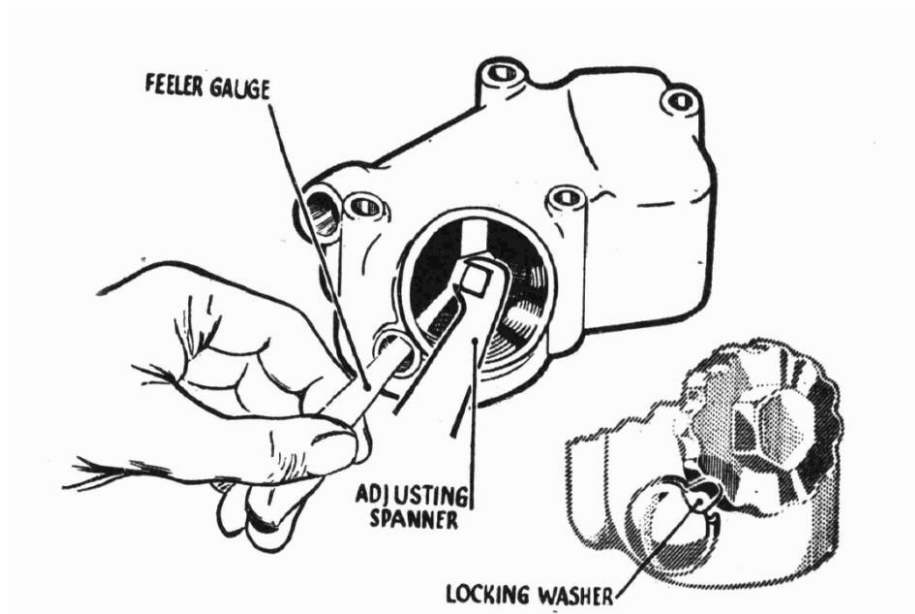
Miss L Berend, a member of the Herts Auto Club, on her new grey 3½hp Free Engine Brough in 1911, long before they became "superior".

## Getting things done

WILL CURRY

It was a remark by Bryan that set me thinking. He'd said that he needed to check the valve clearances on one of his Triumphs and he wasn't looking forward to it as access was difficult.

My Ariel singles aren't too difficult although the method of adjustment is common to Triumph twins up until nearly the end of their production. Access to the adjuster is via a screwed-in cover over the end of the valve concerned. Taking the petrol tank off isn't a trivial task but I've never felt the need when it comes to valve clearances. Ariels used clearances of nil and 0.002" up until the early '50s when they introduced cams with quietening ramps which need 0.006" and 0.008". The early clearances can be estimated accurately enough without the need for a feeler gauge. Once the gauge is needed things become more complicated.



Ariel valve clearances

Somebody at Ariel discovered early on that trying to tighten up the adjuster locknut without the adjuster turning too and holding a 6 or 8 thou feeler gauge all in the opening provided by the unscrewed cover really wasn't the easiest of tasks. Ariels fitted a second access point in just the right place to take a feeler gauge. Better than that, they fitted this access point to their 500 twins when the alloy heads with ramped cams were introduced.

As something of an aside, it's not unknown for the screw-in covers to abandon ship - from Ariels as well as Triumphs. As far as I know, Triumphs never fitted access points for the feeler or any other way of retaining the covers [Ed: later twins had a spring clip retainer]. Later the whole arrangement was changed from 4 screw-in covers to two much larger covers, one for the inlets and one for the exhausts. These gave less restricted access and were secured with 4 small bolts.



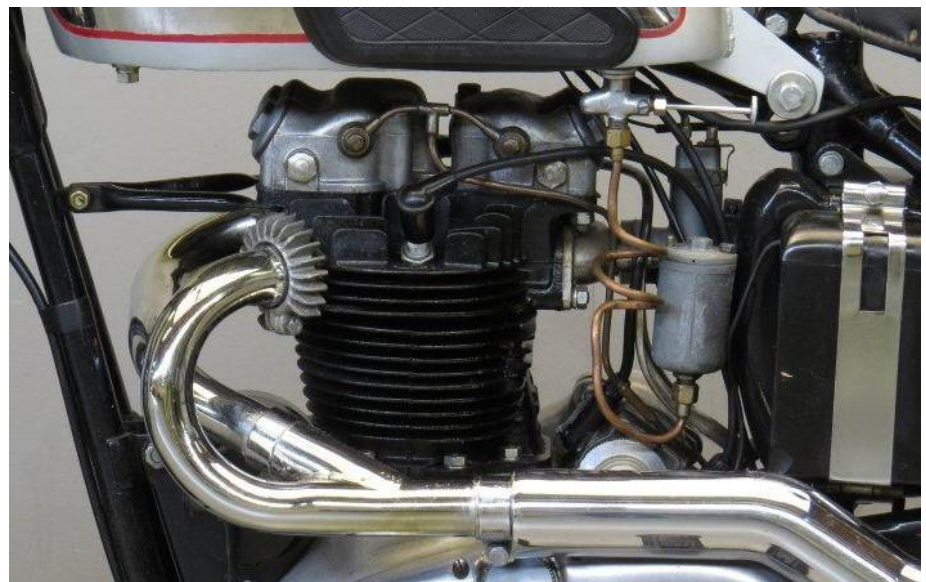
Huntmaster valve cover, this one surprisingly uncracked

The Ariel Huntmaster, a BSA A10 clone, similarly had two covers but secured with a centre nut. Wrong gasket material and over-tighten the nut and the cover cracked. Ariel changed as much as they could of the A10 perhaps out of spite but the A10's covers secured with 4 small nuts is so much better.



BSA A10 valve cover

BSA didn't always use this type of cover. The first version was remarkably Triumph-like as in the picture below.



Early BSA twin rocker box complete with feeler gauge access too

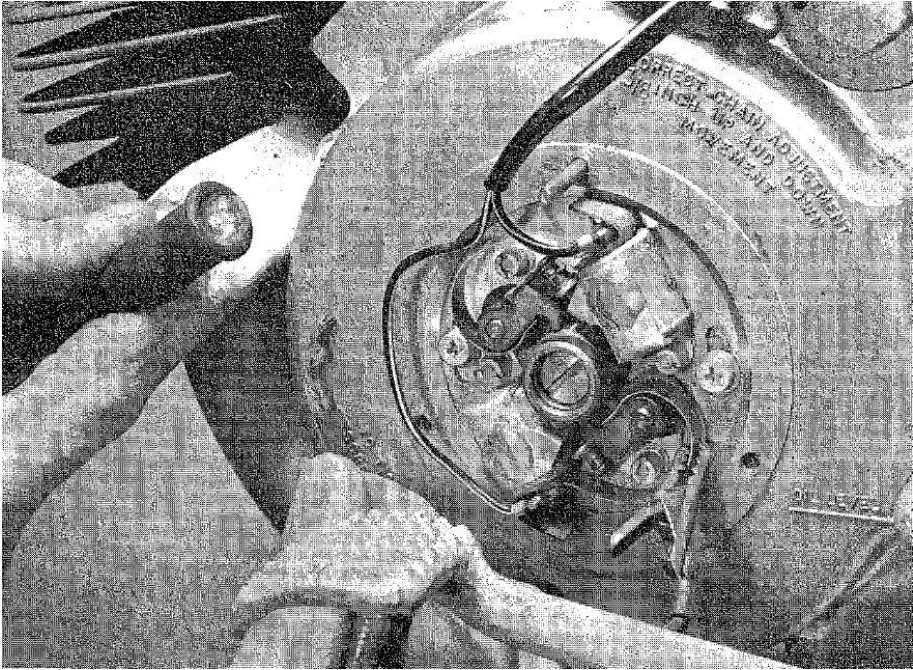
To be fair to Bryan and Triumphs there are maintenance tasks on my Ariels I hate . . .

Checking the points gap on the singles isn't easy as the access is not good with the end of the magneto hiding behind the primary chaincase. This must be a problem common to all magdynos. Taking the dynamo off makes things less difficult but if the points need cleaning or the gap needs resetting, I find it easier to remove the entire points setup. Even this can cause issues as I found out early on in my ownership of Ariels. There is a black nylon tappet - Lucas part 464092 - which follows the face cam and opens and closes the points. This wears on the leading edge as one would expect. It also will fit in two ways round. This I didn't notice until I did refit it so that the unworn edge now led. The ignition was much advanced and the resulting kick-backs unpleasant. Worse was how long it took me to work out what I'd done wrong.



Lucas part number 464092

For both singles and twins resetting the timing is a big spanners, gasket goo and oil bucket job as the timing cover has to come off and, as an added bonus for the singles, a special extractor is needed. I don't think things are any easier for any magneto-equipped engine for that matter. Setting the timing on the Arrow is a doddle in comparison, and presumably later coil ignition Triumphs too.



**Setting the timing on an Ariel two-stroke twin**

Changing the engine oil is fairly simple once a suitable funnel has been found to divert the flow of used oil from the drain plug in the oil tank into the waste oil can. Without this the oil goes everywhere. Crankcases drain via a rectangular pressed tin sump plate which incorporates a wire strainer to try to prevent the worst of the rubbish going through the oil pump and back into circulation. These sump plates are secured with 4 bolts at the corners and are easily distorted by using the wrong gasket material and over-tightening the bolts.



**'Pressed tin sump plate'**

Aftermarket cast alloy sump plates are a huge improvement while those with magnetic filters can be truly terrifying with the amount of swarf picked up by the magnet. While pre-unit Triumph twins had a similar pressed tin arrangement some if not all of the unit twins used a screw-plug much like a rocker box cap - fine 'til the threads get worn.

Adjusting the chain tension on the Ariels is like on any other pre-unit bike: the gearbox pivots or, occasionally, slides to set the primary chain and the back wheel moves to set the rear chain. Any adjustment to the primary means that the rear chain will also need resetting. It's a job that can take time and is more complicated than the same on a unit engine where the primary adjustment is independent of the rear chain.



**Accessible tappets, accessible ignition timing . . .**

But then again, there's the post-war Vincent twin. It's unit construction so the primary chain tension doesn't need the complete socket set. The

rear chain tension can be set by hand - no tools needed at all. The oiling features a full-flow oil filter on the delivery side, so no wire strainers and the crankcase drain plug is exactly that. The valve caps screw in and are nicely accessible from the timing side while the clearances can be set without feeler gauges. While the magneto is no better than any other the access to set the timing is easier as there is a small cover retained with 6 screws which gives access to the timing gear without having to remove the timing cover. This small cover is something of a necessity really as the exhaust system has to come off if you really want to take the timing cover off.

So, put pen to paper or fingers to keyboard and share what you like and don't like about your bikes. [Ed: please do]



## *A day to remember*

**DAVID JORDAN RECALLS THE DAY IN THE 1960S WHEN AS A NERVOUS TEENAGER HE TOOK HIS RIDING TEST.**

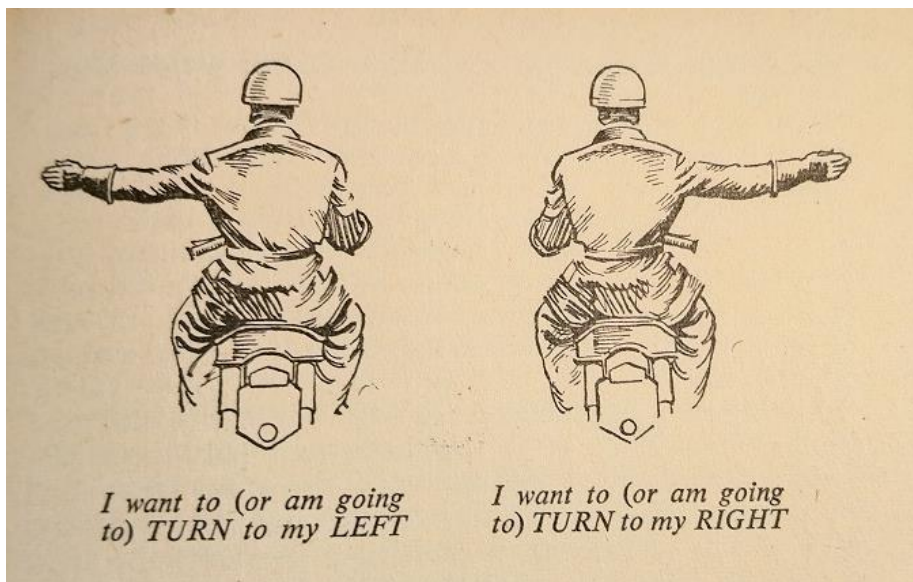
It was one of those days I will always remember. I'd turned 16 at the end of August 1964 and now as October was drawing to an end it was time to take my bike test. With all of two months' riding experience under my belt and a six-penny copy of the Highway Code stuffed down my jacket for a bit of last-minute revision, I fired up my old Model 65 Panther 250 and headed for the test centre in Hessle, East Yorkshire. There was no training for young riders in those days, at least not that I knew of, but like most 16-year-olds, I knew everything anyway and was confident I'd pass. But as I parked the bike in the town square opposite the test centre the bravado started to wane and, as the hand on the church clock moved ever closer to my appointment time of 10:00 o'clock, panic began to take over.



With my jet-pilot crash helmet tucked under my arm and my heart beating in my throat, I shuffled into the test centre and took a seat with the other terrified souls in the waiting room. Spot on 10:00, the door opened and a pipe-smoking man, with a trilby hat, moustache and a faded gabardine raincoat entered the room. "David Jordan," he bellowed with a distinctive Hull accent. To me, he looked very old, but was probably only about 35 - I think people did look older in those days. I jumped to my feet. After carefully scrutinising my provisional licence, the examiner handed me his clip board and pen. "Sign here lad and then make your way to your machine," he said.

Nervously, I approached the old Panther - now straddling a pool of inky-black oil - and awaited instructions. "I want you to take the first turn on the left and continue turning left until I tell you to stop. Is that quite clear? Carry on when you're ready please," said the examiner. I switched on the ignition, tickled the carb and gave the kick-starter a good follow-through swing, praying it would start. To my relief, it fired-up first time and I rode off, leaving the examiner standing in a cloud of blue smoke.

For younger readers, I should point out that, back in the day, examiners didn't follow their candidates around the test route as they do now. Instead, they would send you around a left-hand circuit and make sure you gave proper hand signals - no indicators in those days - and that you were roughly in the right position on the road. Then they'd send you around the other way to see if you could turn right.



Things were going pretty well when, on the second lap, the engine began to falter and the bike came to an agonising halt - I'd forgotten to switch the petrol on! Luckily, I was out of sight, so the examiner was none the wiser.

After a few more circuits he flagged me down for the next exercise - the emergency stop. "I want you to continue around this route and as you approach me, I will step into the road and raise my hand like this," he demonstrated. "When you see the signal, you must stop your machine under control as in an emergency. Is that quite clear? Carry on when you're ready please." I must admit I was a little concerned for the examiner's safety. The Panther's brakes were well past their best, in fact I suspected the front one didn't work at all! Anyway, on the second lap, he jumped out into the road and I slammed all on. To my astonishment and relief, I stopped just a few inches from his feet. To this day, I don't know how. It must have been divine intervention - it certainly wasn't the bike's appalling brakes or my teenage riding skills!

The last challenge was the slow-riding test, where the examiner walks along the pavement varying his speed and you have to stay alongside. Apart from the engine screaming its head off with a sticking throttle, things went quite well, and it was back to the test centre for my three Highway Code questions. I only remember the first one, "What is the overall stopping distance at 30 mph?" I was in luck; I'd been revising the table while I was waiting in the square. "Seventy-five feet," I said triumphantly, although I couldn't help thinking it would be more like seventy-five yards on the old Panther. After another couple of questions, it was all over and I was handed my pink slip - I'd passed!

That was over sixty years ago, and a lot has changed since then for would-be motorcyclists. Compulsory basic training, theory and hazard perception tests and then a manoeuvring test before a final one on the road. There's also a whole bunch of rules and restrictions about what you can and can't ride that would tax the brain power of Professor Brian Cox, let alone us mere mortals ... such is progress, I guess.

Sometimes I wonder how we've all survived.

**IT WAS TO BE A LONG WAIT**

Those who have been anxiously awaiting the appearance of a twin-cylinder Triumph will still have to wait in patience, as next year this famous firm will specialise once more in single-cylinders. [The Motor Cycle, October 30<sup>th</sup>, 1913]

*Aston Hill motorcycle events – Part three*

**BRYAN MARSH**

*[This is the final instalment of a three-part article on the motorcycle events on Aston Hill near Tring, based on the presentation I gave last year at a club night. It has been cobbled together from contemporary motorcycle publications and newspapers and deliberately uses a lot of the wording from these reports because they express things better than I ever could.]*

The last event of 1910 was successfully run off at the end of October in spite of threatening weather. As the event included a flexibility test, the start was about 200 yards lower down than usual, making the course about three-quarters of a mile long. Competitors were allowed about fifty yards in which to get going. In Class A, Yates was in great form and, as usual, rode his little Humber excellently, making the fastest time and also first on formula. In Class B, Lister Cooper made fastest time and was first on formula, but failed in the slow test. Contemporary reports said that many "konks" were heard from the engines on the steeper portions, and the number of failures in this test showed that engines are not as flexible as they are supposed to be. Hardy won the flexibility test by the huge difference of 5 mins. 43½ secs between his fast and slow runs, quite a remarkable performance. The passenger class was a gift for Hardy, as W. Cooper failed on the first steep portion through over-gearing. Class F was marred by an accident to Wilberforce, who parted company with his Indian and turned a complete somersault at the ruddy bend on the second steep portion. Fortunately, he was not badly injured but suffered considerably from shock. The surface of the hill was in very good condition but the mist was rather thick near the top. As a result of this, Yates mistook the finishing line and slowed up prematurely, but on appeal to the judges he was allowed another try.

A well-organised event in October the following year, 1911, again saw some good sport. J. T. Bashall on his big Bat-Jap made fastest time of the day. In Class VI he came up to the first bad pitch at such a speed that he took to the grass at the first corner but made an excellent recovery. The other Bashall, Harry, thrilled the spectators with his terrific speed and the manner in which he managed to get out of the gutters on either side of the road when taking the bends. With his teeth clenched he was out to either win or smash. He left the road completely at three corners, his Bat leaping, roaring, swaying and rushing on like a thing possessed and, without faltering, came in sight of the finishing line where he must have been doing 60 miles an hour. He lost his steering for a fraction of a second and, careering onto the grass, it appeared that he must fall, but he recovered control magnificently and hurtled under the finishing barrier.



**J T Bashall's medal for fastest time of the day – recently found on eBay**

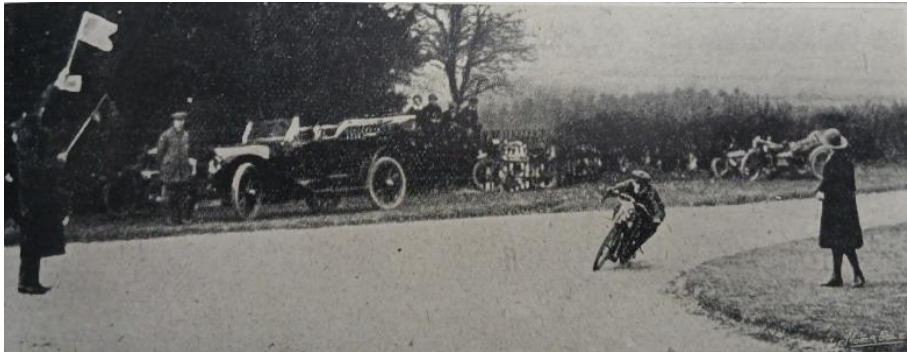
In 1912, the Essex Motor Club, being short of anything that could be called a hill, had to search other counties for a suitable gradient on which the powers-that-be would allow a hill-climbing competition. Aston Hill was found, but the venue of the competition was kept secret so well before the event that not a single competitor had made the ascent in

practice before the actual event. It had rained very heavily in the night, and those who journeyed to Tring by road found patches of grease at frequent intervals, and soft, ruddy parts which rendered the going far from pleasant.

The car class was down first on the programme, but, because the heavier vehicles were likely to cut up the road, the motorcycle classes were run off first. The surface of the hill was in good condition, apart from the ruts which were always there. The passenger class for machines not exceeding 1,000 c.c. was thrown open to cyclecars, but none entered. Barnes made the most sensational performance in the Passenger Class, while Applebee, on the Scott, and Pratt did extremely well.

In Class B, for machines not exceeding 350 c.c., Zeniths distinguished themselves: Weatherilt carried off the gold medal, and Mundy, who took second place, rode an absolutely standard machine with lamp, pedals, and upturned rather than racing handlebars.

Some machines had to be disqualified through noise, which seemed a pity especially where they had done well, such as the Bashalls' Humbers, which made splendid ascents, and Elce's Rudge, but it was thought to be the only way to bring pressure on the manufacturers to pay more attention to silencing.



**W H Elce (3½ Rudge) rounding the corner at the foot of the hill**

In the class for machines up to 500 c.c., there were some interesting and exciting incidents. Holloway was impeded on his first attempt, but on his second try he roared up to the summit in splendid form sitting on his Premier as if it were part of him, taking the top corner in a manner which evoked murmurs of approval on all sides. Cook and Gray, mounted on Ridges, both swerved in the ruts; B. Patterson on a Brown pulled up abruptly in the middle of a good ascent through either a fouled plug or choked carburetter. Oliphant rode his Premier without a contact breaker cover and was brought to a standstill at the first bend through the ring on which the cams are fixed coming off. Oldman appeared to suffer from too high a gear on his Bat and came up slowly.

In the class for machines not exceeding 750 c.c., Barnes again proved the worth of the Zenith Gradua gear, and made a splendid ascent. Lees made a picturesque climb with one legging half detached and flying out in the wind. Newman came up well wearing a weird headgear.

Class E, for machines up to 1,000 c.c., provided one or two exciting incidents. Moorhouse took the second bend rather too close and then pulled up suddenly with a broken chain. Hal Hill's rear tyre, which had previously given trouble, collapsed at the second corner, sending him all over the road, but clever manipulation saved a nasty spill. Barnes and B. A. Hill both made splendid ascents and rode in fine form.

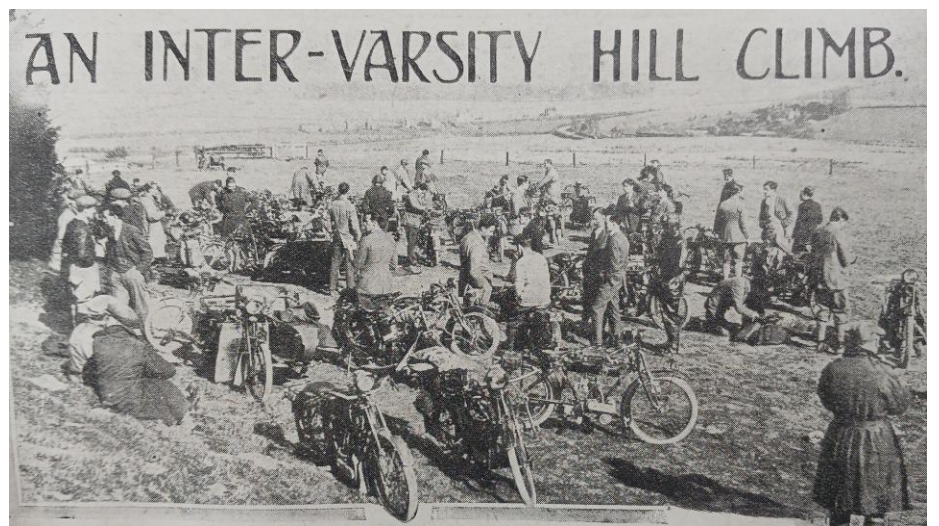


**Freddie Barnes (8hp Zenith and sidecar) passing the timekeeper at the foot of the hill**

Other clubs using the hill included Oxford and Cambridge Universities, in inter-varsity challenges, and the Mid Bucks Motor Cycle Club, who also held a speed trial in Aston Clinton Park. A climb of the hill was frequently included in long distance reliability trials.

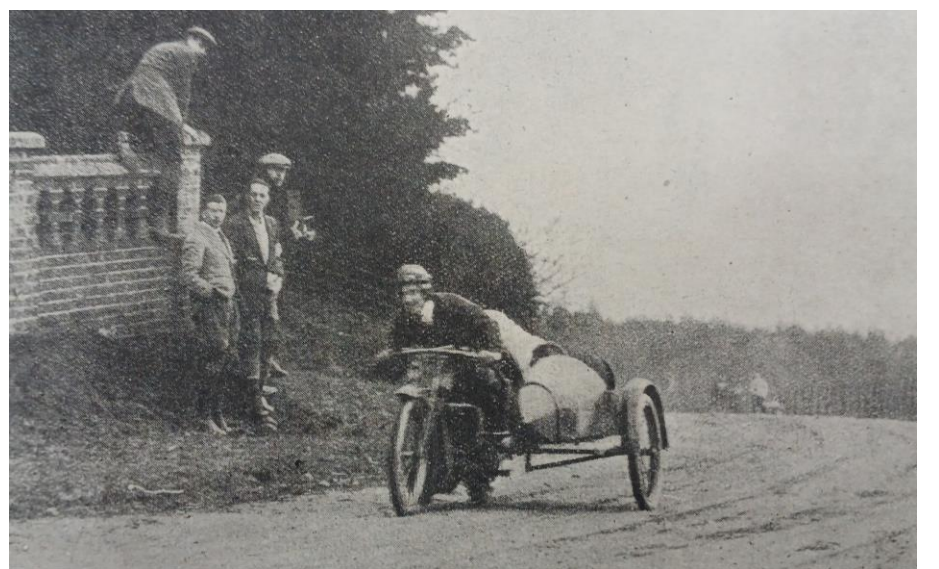
Obviously, there was a lull in activity whilst the world was at war from 1914 to 1918 but an unfortunate incident happened in August 1916 when Mr. Horace Hawes, of Chesham was motorcycling from Chesham to Wendover with a passenger on the back. Going down Aston Hill he had a side-slip, with the result that both were thrown heavily to the ground. Captain Haughton, R.A.M.C., and some orderlies were quickly on the spot and rendered first-aid. The passenger, Mr. Glenister, sustained a bad wound across the forehead, an injured left leg, and he was suffering from shock. Although Mr. Hawes sustained no apparent external injuries, it was evident that he was also suffering from severe shock. The services of an Army motor ambulance were requisitioned, and the unfortunate men removed to the Royal Bucks Hospital at Aylesbury. The machine was damaged in various ways.

Inter-varsity challenges resumed after the war in 1920 and the first resulted in a dead heat, each University gaining 32 marks. The day was beautifully fine, though the wind was cold. This, however, served to dry the surface of the hill, which was in pretty good condition, though a trifle bumpy in places.



**Preparing for the climb**

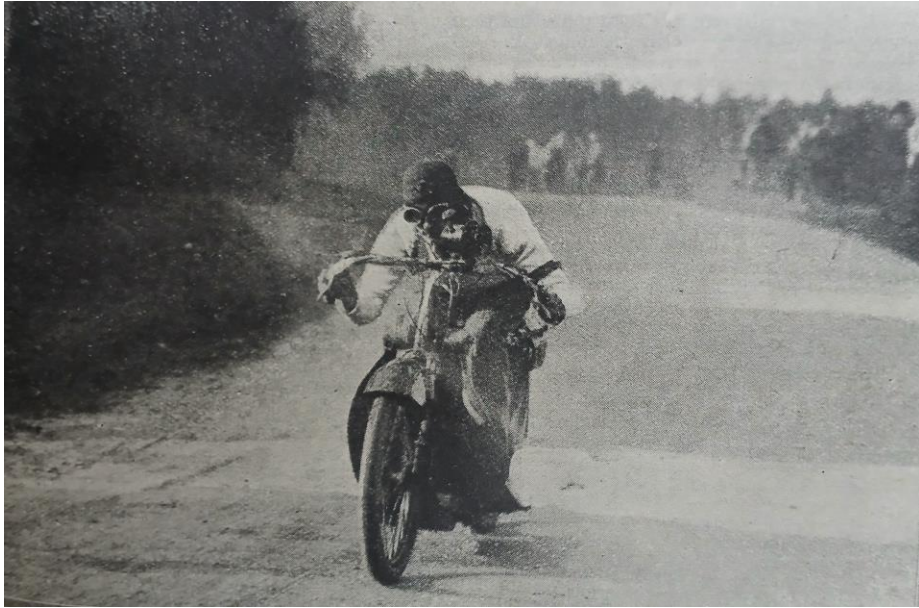
The event created a great deal of interest, and, considering that the delivery of new machines was slow as manufacturers were getting back to normal, the number of competitors was quite remarkable. Of the two Universities, Cambridge produced by far the most entrants, and it was a curious fact that motor cycling had always flourished to a greater extent on the Cam than on the Isis. Among the numerous machines to be seen at the start were two of the new N.U.T.s, a Beardmore-Precision, and one of the new flat-twin Harley- Davidsons.



**L P Openshaw (Oxford) making his sensational climb in the unlimited sidecar class. His overhead valve Zenith and Middleton sidecar came up the hill like a shot out of a gun**

Among the competitors, the best-known rider produced by Oxford was Openshaw, who was now a Professor of Engineering at the University. Dons were allowed to compete along with the undergraduates at that time but was stopped the following year. He was riding an overhead valve Zenith, the only machine of its type in the competition, which, as usual, was well ridden and wonderfully fast, possibly having benefitted from much experimental work in the Engineering Department of the University, including design and manufacture of aluminium pistons. On the Cambridge side, T. V. Prestwich, son of Mr. J. A. Prestwich, of J.A.P. engine fame, was riding a Diamond. The organisation was good and the field telephone worked without a hitch.



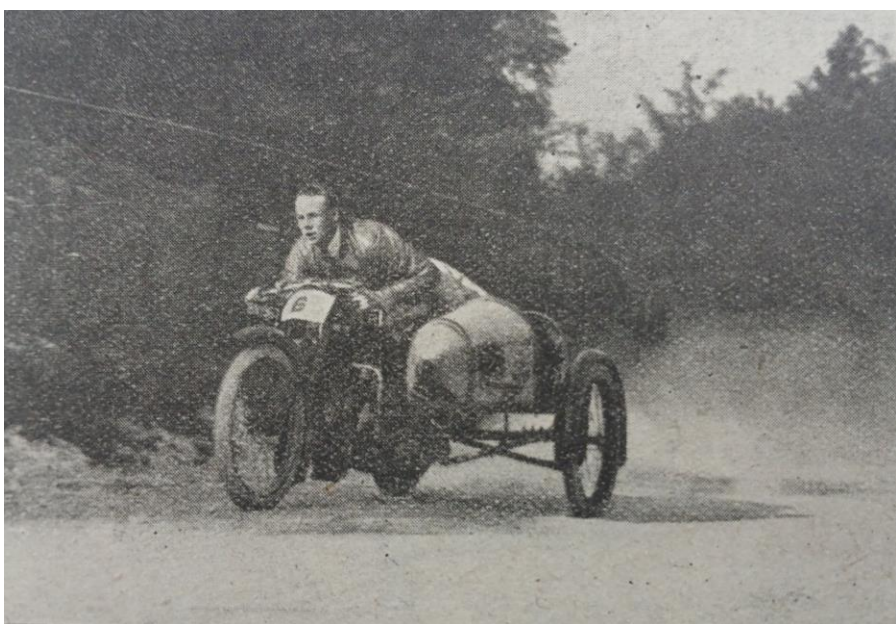


**R A Mallet (Oxford), while making a good climb, did not seem to be having the best of luck with his Scott**

The event concluded with a slow hill-climb over a distance of 100 yards. Slipping of clutches or touching the ground with the feet was forbidden. The winning slowest motorcycle was Oxford rider Rathbone's Rover. Time, 1m. 15s.

Aston Hill was again the scene of the Oxford v Cambridge motorcycle hill-climb in March, 1921. The organisation was much better than the previous year, and an excellent programme was published which gave the following particulars concerning the hill: Length of course, 750 yards, steepest gradient 1 in 8, average gradient 1 in 14. As the day was fine there were numerous spectators. Among the competing machines once again was Openshaw's overhead valve Zenith but ridden by I. Riddock in the absence of its owner who was abroad, and a Verus-Blackburne ridden by T. Lindsay, to which an overhead valve system had been fitted by a Mr. Adams, of Belfast He had constructed a special head with the valves inclined towards one another; the tappet rods were also at opposite angles, and the plug was inclined to the centre of the combustion head.

The competition started late, but the first class was run off smartly until the crowding of the spectators at one of the corners caused some delay before the course was cleared. Most of the competitors complained of the road surface, which caused many a wobble at high speeds. Each solo machine could be ridden twice up the hill, the best time of the machine counting in any class for which it was eligible. Riddock, mounted on the famous Zenith, made the fastest time of the day.



**I P Riddolph (Zenith) snapped in the act of making fastest time**

Harwood who, it was said, tuned his machines with a hammer and a big drill, took his Sunbeam up very well, and slightly faster than another Sunbeam ridden by E Reed who was reported to have touched 60 "*the day before*". Heavy rain disrupted the 350cc class, but the humourist of this class was said to have been K D Bates who patted the tank of his 225cc Baby Triumph as he ambled up the hill.

In addition to the medals presented to the winners in each class, Oxford won a cup valued at fifteen guineas, presented by the Motor Cycle Manufacturers' Union.



**J G Goodenough (3½hp Norton) has a little assistance at the start**

Oddly, another inter-varsity event on Kop Hill later that year was stopped by the Police some one-and-a-half hours into the event despite them having been notified three days in advance. This obviously upset the organisers who, had they known, could have cancelled the event in advance saving a lot of inconvenience and expense. The event was being held on a Sunday, which they thought may have been the problem, but so had been the Aston Hill event, and a policeman had been present throughout the Aston event. The police actually stopped the event on the grounds that the 20 mph speed limit was being exceeded but had intimated that a weekday event would have been preferable - so the question was raised whether it was OK to break the speed limit on a weekday but not a Sunday.

The March 1922 inter-Varsity event was postponed owing to the "unpropitious" weather.

The final inter-varsity climb on Aston Hill was held in March 1923. By this time, the hill was regarded as not steep enough to stop spectacular climbing, but not easy enough to make the climb a certainty. Cambridge won hands down; they literally trounced the Dark Blues and won practically every class, thereby taking back the trophy presented to their opponents the previous year. The press commented that the best entertainment was the excellent work of the sidecar men with their passengers heaving themselves out of the sidecars to facilitate the cornering of the drivers. Some of the undergraduates had the greater portion of their bodies outside the sidecar, and apparently had their feet wedged inside somewhere. One the Cantabs made a wonderful climb - a one-legged man, leaning right across the sidecar so that there was not an ounce of live weight on the offside.

Either the motorcycle events on the hill ceased after this 1922 event, and had possibly moved over to Kop Hill, or the press no longer found them worthy of mention as I have found no further reports of motorcycle events in the period up to February 28<sup>th</sup>, 1925 when the final event - an intervarsity car event - was held on the hill although another event had been scheduled for later in the year. This never went ahead because a month after the intervarsity car event, an accident on Kop Hill, where a Bugatti lost control on the ascent and crashed into a spectator who had refused to move back out of the way, breaking his leg, signalled the end of speed hill climbs on public roads for good.

This article would not have been possible without the wonderful resources of the VMCC and the British Newspaper Archive. Thanks also to Yesterdays Motorcycles in Holland for the picture of the Moto-Reve.

**Footnote:** details of the celebration event to commemorate the 100<sup>th</sup> anniversary of the final event on Aston Hill can be found on the website [astonhill100.com](http://astonhill100.com). It's intended to be a one-off so won't simply be a copy of the Kop Hill event. There'll be an invitation hill climb demonstration featuring contemporary cars and motorcycles, an exhibition in the pavilion in Aston Clinton Park. There'll also be a large car and motorcycle show on the day which is open to all British and European pre-1980 vehicles. Tickets are just £5 to enter, which is the same price as a spectator ticket. I've submitted my entry for the 1926 ex-Geoff Hoden Triumph Model Q - should be a good day out.

## Building a Power Pak

CHRIS SAWYER

**The Sinclair Goddard Power Pak (PP) is a roller-drive 50cc clip-on unit, known for its good performance, ease of installation and effective roller design. In November 2022, I bought a Power Pak (PP) at the VMCC AGM in almost complete condition. How did I get on with it?**

Despite being an ardent chain drive enthusiast up to now, in my very early days looking at cyclemotors, the simplicity of the classic roller-drive extended single side crank with roller and mag appealed. I have to admit that as a compulsive special builder, my first thought was to make the new PP into a chain drive similar to a picture that I once saw of a Mini Motor. However, having got the unit home and rigged it up on the bench to see if it ran, I thought that at least I should take the easy route and see if it was any good in its intended format. The engine did run after replacing the inevitable duff ignition coil with a battery system, and so it was filed away in the shed under 'pending projects'.



Raleigh Superbe with Power Pak

It was the following autumn when I was looking to come in out the cold garage into the heated workshop that I decided to start looking at the PP Build. I had a bike that had been fitted with two previous experimental projects, an 8-speed Cyclemaster and a chain-drive Teagle. The bike used a rubber-bushed sandwich plate mounting system that I had devised which located in the frame stays under the saddle. This would be ideal to adapt to mount the PP in a similar way to the original. It didn't take long to have the PP bolted to the frame and sitting on the tyre. One missing part was the rear tie rod and its clamp. The rod was not hard to make, but the clamp was originally a pressing which must be a good fit on a rubber bush and not easy to copy. I did this by turning a sleeve and welding on the lugs.

A word here about the original PP method of adjusting the roller force on the tyre. At the side of the engine unit is a convoluted lever. This is pivoted in a trunnion which is part of the engine casting (of course mine was seized). To the rear of this pivot the lever is connected to the tie rod which connects down to the rear spindle area, i.e. fixed. The lever is bought up to the front of the engine so that pushing down on the lever also pushes the roller down onto the tyre. The front of the lever is able to be located into one of three slots which are effectively part of the engine. The uppermost slot is described as for lifting the roller clear of the tyre, the mid position is normal running and the lower slot is for what the manual describes as for running with a soft tyre. It doesn't mention giving grip on a wet tyre. The lever is not movable when running, probably deliberately.

Sadly (or maybe not) the slot casting was cracked and so another method was called for. This is where my interest started to awaken. I decided that for the raised roller mode, it would be interesting to have a handle bar lever system, i.e. a kind of clutch. In a later model called the Synchronomatic, the PP had a proper clutch with a particularly odd twistgrip control. I later decided to christen my arrangement as Semi-

Synchronomatic as it will disengage as a normal clutch but it might not be desirable for the tyre if a spinning roller was dropped onto a stationary tyre, best to get going first.

The second part of the action was to give the roller sufficient downwards force (normal reaction) to generate drive. This was achieved by making a loose plate with 5 slots and fixing it to the lower frame stay by means of elastic chord. Fine tuning would be by altering the 'spring force' by adjusting the cord length and number of strands by trial and error. This simple system worked well from the outset so moving onto the raising mechanism:

First, I had to find the optimum cord force to give good dry road roller grip so as to represent that part of the load the lift device had to deal with, the other part being the weight of the PP itself. My other objectives were to be able to lift the roller 1/8" (3mm) clear of the tyre as stated in the manual. The second part was to have a lever load to be no worse on the hand than an average (British) motorbike clutch. Here we have the classic design issue of the trade-off between high (geometric) leverage, less travel, low force and low leverage, high travel, high force. I looked in my boxes of bits and found a long clutch lever with a convenient decompressor lever attached. This seemed as long as I could reasonably fit anyway. The cable pull from this goes horizontally along the frame to just above the aforementioned PP lever which is to be pulled upwards. It was here that I contrived to mount, on the sandwich plate, a rocking lever with various holes to mount the horizontal input and vertical output connections. In the end, I had to make two levers, the second with more adjustment holes and a stronger mounting post. The optimum ratio was determined by what I would call empirical methods and what some might call hit and miss! At all times I tried to minimise friction and optimise lever geometry as you do with a brake lever for instance. Also, to maximise the effect of the handpull, I extended the left-hand handlebar by a couple of inches to get my hand right at the end by the ball-end. Here endeth the first lesson.



The Lift Mechanism

I did have some running problems with the carb mixture and had used the expedient of a couple of washers on the float which seemed to work. However, when reading the manual (a bit late) It emphasised the importance of having the PP level, particularly the float chamber. As they say, if all else fails, read instructions. So, I remade the outer sandwich plate and the tie rod to get this right, removed the washers and

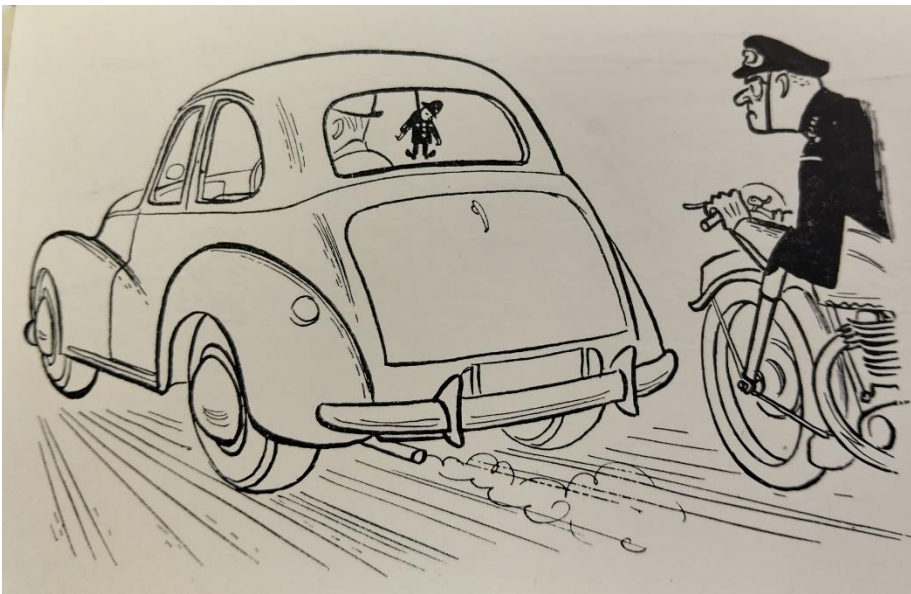
all seemed much better. I took the opportunity to extend the plate with two ears to mount some modern Vee-brake levers to compliment the front combined caliper/drum brake so even if it didn't go well it should stop well!

I mentioned the coil/points/battery ignition system. I decided to enhance this with an 18v Bosch power tool battery reduced to 6v. Using a known battery is, in a nutshell, compact, powerful and safe. The battery box also incorporates a master switch for further safety. The final cycle-based novelty was a traditional cycle headlight modified (discretely) to take a 6v LED bulb.

At this stage, flushed with (relative) success, I decided to take it all apart and paint it in the same fetching shade of Rustoleum Moss Green as my Hybrid. As a contrast and to match the new transfers (actually now stickers) I justified the decision to paint the tank and mag cover in the Gold used on the Synchronatic models. Incidentally the cycle is to my assessment a Raleigh Superbe model. The whole thing was finished off with a set of matching Raleigh-type control cables in white and a home-made leather tool bag.

So how did it go? Well, it is suggested that a speed of 27-30mph is achievable at 3000 erpm. My calculation is that no more than 18 mph would be possible at that speed on the level although I have achieved up to 24 mph with a bit of running so in truth maybe better than a Cyclenaster although on a measured route the average speed is much the same although the PP does pull better on hills as befits its 50cc capacity. I find it a pleasant thing to ride and although the 'clutch' is a convenience in traffic, the decompressor works really well as the PP is a very ready (re)starter.

So, in conclusion, an interesting exercise and a welcome addition to the stable.



## A Christmas Kwacker

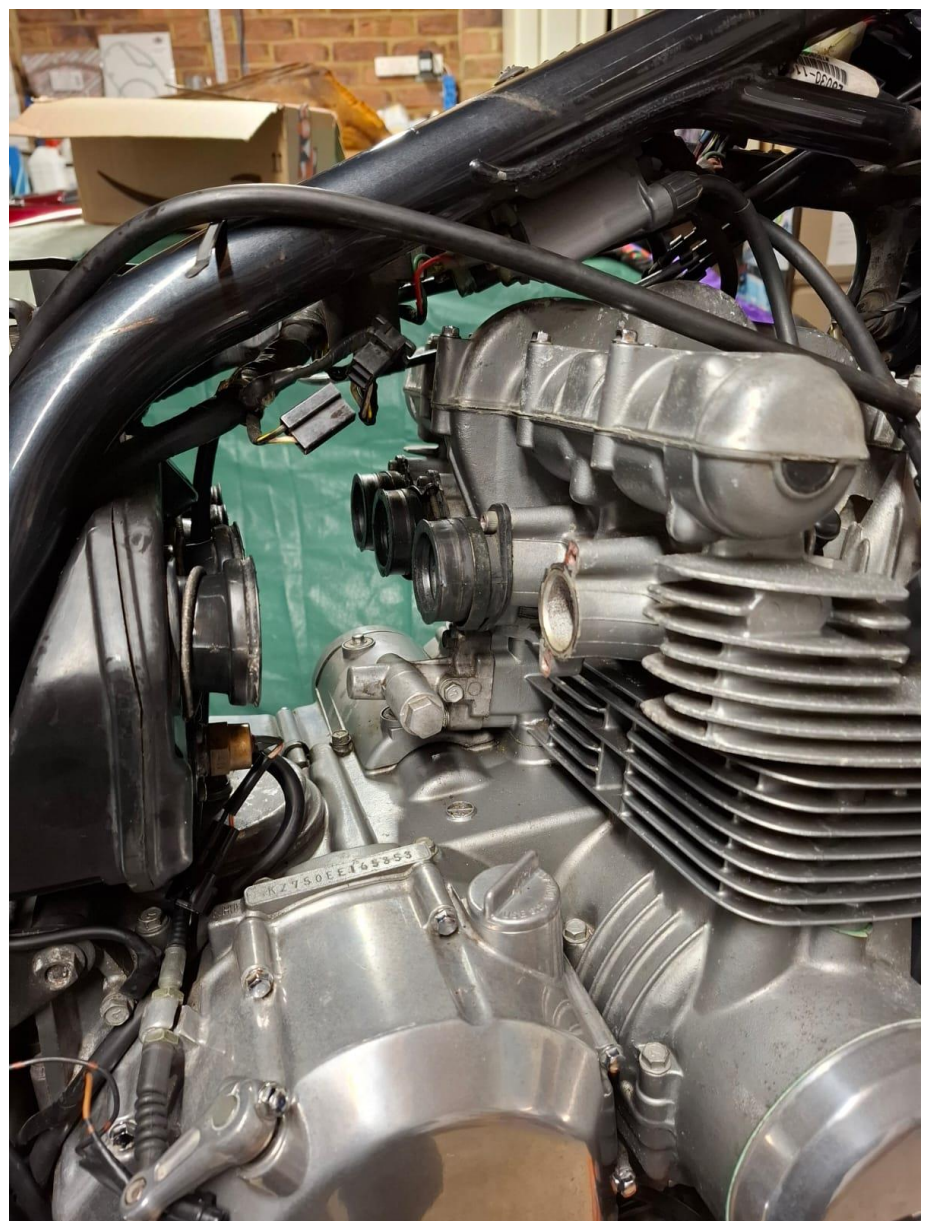
ANDREW (SAM) SAMWAY



Recent purchase, on the bench



Carb cleaning



Was a fight to get them off – will be fun to refit!



A 1994 Kawasaki 750 Zephyr for £700!

## VMCC Bedfordshire Section Diary – 2025

09 Jan	Club Night - Jacqui Furneaux/Gordon May, Adventurers
16 Jan	Mid-Week Lunch - Nuyard Garden Centre, Westoning
26 Jan	Breakfast Meet - Shuttleworth
06 Feb	Winter Wanderings Run – from STMA, Shefford
13 Feb	Club Night – John Young, Daytona Race Bike No. 8
20 Feb	Mid-Week Lunch – Musgrave Arms, Shillington
23 Feb	Breakfast Meet – Jordans Mill, Broom
06 Mar	Winter Wanderings Run– from STMA, Shefford
13 Mar	Club Night – Quiz Night
20 Mar	Mid-Week Lunch – Keysoe Equestrian Centre
30 Mar	Breakfast Meet – Nuyard Garden Centre, Westoning
03 Apr	Winter Wanderings Run
10 Apr	Club Night – Possibly a film night
13 Apr	Spring Run - TBA
17 Apr	Mid-Week Run – from STMA, Shefford
27 Apr	Breakfast Meet – Maypole Farm, Kempston
08 May	Club Night – Ride-a-Bike-to-Shefford <b>NB usually in June</b>
11 May	Roger & Arthur King Memorial Run (girder forks & outfits)
15 May	Mid-Week Run – from STMA, Shefford
19 May	Visit to Velo Club, Rose & Crown, Ridgmont
25 May	Breakfast Meet – Danish Camp, Willington
12 June	Club Night – Fish & Chips <b>NB usually in May</b>
19 June	Mid-Week Run – from STMA, Shefford
29 June	Breakfast Meet – Jordans Mill, Broom
10 July	Club Night – Ride-a-Bike-to-Shefford
17 July	Mid-Week Run – from STMA, Shefford
27 July	Albert Brown Run - TBA
14 Aug	Noggin and a Natter
21 Aug	Mid-Week Run – from STMA, Shefford
24 Aug	Breakfast Meet and Summer Saunter – Shuttleworth
31 Aug	Breakfast Meet – Jordans Mill, Broom
11 Sept	Club Night – Brent, My Motorcycling Life
18 Sept	Mid-Week Run – from STMA, Shefford
21 Sept	Sand and Motorcycles
28 Sept	Breakfast Meet and Autumn Run – Shuttleworth
02 Oct	Winter Wanderings Run
09 Oct	Club Night - TBA
16 Oct	Mid-Week Lunch – Cross Keys, Pulloxhill
26 Oct	Breakfast Meet – Danish Camp, Willington
06 Nov	Winter Wanderings Run
13 Nov	Club Night – AGM and Slide Show
20 Nov	Mid-Week Lunch – Nuyard Garden Centre, Westoning
30 Nov	Breakfast Meet - Shuttleworth